COURSE OF STUDY

BALTIMORE COUNTY SCHOOLS

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COURSE OF STUDY

BALTIMORE COUNTY, MARYLAND, PUBLIC SCHOOLS

GRADES I TO VIII

W-AND-Y COURSE OF STUDY SERIES

EDITED BY

H. E. BUCHHOLZ

Teach.
B.

COURSE OF STUDY

BALTIMORE COUNTY, MARYLAND, PUBLIC SCHOOLS

GRADES I TO VIII

PREPARED BY

LIDA LEE TALL

AND

ISOBEL DAVIDSON

UNDER THE DIRECTION OF

ALBERT S. COOK,

Superintendent



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PREFACE TO 1915 EDITION

This Outline of Study is published by order of the Board of School Commissioners of Baltimore County, and in accordance with the By-Laws of the State Board of Education. It shows more or less in detail the subject matter by topics to be covered in each of the eight elementary grades, as well as the text-books, supplementary books and teachers' desk and reference books to be used; it also indicates aims and to a certain extent suggests methods of teaching.

The Course of Study published in 1908 has been carefully revised and reconstructed by committees of teachers representing the various grades. All the suburban schools and teachers were not only invited to send in suggestions and criticisms of the 1908 Course of Study to these committees, but they were repeatedly requested to do so, until a reply was received. These suggestions were worked over by the committees of teachers working with the grade supervisors. Great care was taken to secure unity from grade to grade; to futher secure this end, outside specialists in various subjects were asked to criticise the subject matter as a whole in their special fields.

The present Course of Study may, therefore, be characterized as the crystallized present judgment of large groups of specialists in grade teaching and of specialists in grade supervision, together with the judgment and helpful criticism of subject specialists not connected directly with our schools, on the organization of subject matter in their special fields. As such, it affords a new point of departure in our elementary school work. It represents our best experience and our present ideals and practice. Growth is expected to go on again from the moment it is put into use, and consequent modifications will be made in group meetings, as heretofore. It is intended to be no more static than any previous course.

The Course of Study will be especially helpful as a guide to new teachers entering the corps, and, I trust, will prove an inspiration for further achievement to teachers and supervisors now in the corps who have so generously contributed their time and thought to its organization. The new form, also, will no doubt make it more usable and more attractive in appearance.

Although this Course of Study is prepared mainly for the suburban schools, it will also prove a valuable aid to the rural schools.

after certain eliminations and additions are worked out in the rural school groups with the supervisor during the Institute and in group meetings.

ALBERT S. COOK,
Superintendent.

Towson, Maryland,
September 1, 1915.

PREFACE TO THE 1919 EDITION

The new Course of Study for Baltimore County Public Schools, of which this is a reprint, was published in September, 1915. The edition was intended to cover the County's requirements for approximately ten years. As soon as the work appeared, however, its superior merits were recognized and advertised by leading educators throughout the country. As a result of this unexpected publicity, requests for single copies of the work and unsolicited orders for sufficient quantities to provide all the teachers in other systems, practically exhausted the edition in less than two years. Seeing the necessity of making preparations for a reprinting of the Course for the County's own requirements, the School Board somewhat reluctantly consented to have the work reset and offered as a number in W-and-Y Course of Study Series. In the main the text is the same as that printed in 1915, although the form has been changed through a somewhat general elimination of the tabular method of presentation. The opportunity to revise parts of the text in accordance with the further development of the Course in the schools of Baltimore County was at the same time embraced.

H. E. B.

January, 1919.

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READING: PRIMARY GRADES*

Introduction. Reading is beyond comparison the most important of the conventional school exercises, not only because it is the key to the world's great literature, but because any considerable advancement in the other departments of school work is impossible without it.

The attempt is made to fix permanent habits of selecting and reading good literature by providing from the earliest grades only good literature. Stories are told in one grade and read in the next. The material rich in childhood's fancy bears this sort of repetition because it has permanent value in stimulating the imagination in this most impressionable period.

Two distinctive characteristics of the primary period are summarized in imagination and imitation. They are used as means to surmount the difficulties of learning *how to read* without losing the joy which is essential. "To miss the joy is to miss all." Ideals of good reading are established by a judicious use of these two gifts through skillful questioning on the part of the teacher to stimulate creative thinking and by reading to the children in a simple, clear, dramatic, yet unaffected manner. Children read for the same reason as adults, so a natural, wholesome atmosphere should be maintained by supplying proper motives and rational procedures.

The aim of primary reading, as in all reading, is the interpretation of the printed page with accuracy and a reasonable degree of rapidity. The realization of this aim is dependent upon (1) the mastery of the tools, or the mechanics of reading, (2) the ability to interpret the thought, (3) increased skill in expressive utterance. Of necessity much time is devoted to the mechanics of reading in the primary grades. While the study of the form, sound, and meaning of words, commonly called Word Study, occupies much attention, it does not eclipse expression of thought. Reading here, as in later grades, is a search for ideas and their interpretation for personal or social enjoyment. In all the grades, according to the need of the class, study for word mastery and thought getting through the context precedes practice in oral reading.

*Considerable material and many of the ideas in this section have been drawn from *The Elementary Course in English* by Professor James Fleming Hosic, Head of the Department of English, Chicago Normal College. Unless otherwise indicated, all quoted material in the outline for Grades I to IV has been taken from Professor Hosic's *Course*.

A judicious use of phonetics; of word and phrase drills; of exercise in enunciation, articulation, and pronunciation; of exercises to increase the reading pace are essentials in gaining power to read and these drills follow rather than precede the interpretation. As we learn to walk by walking, to talk by talking, to write by writing, so we *learn to read by reading*. Good material is provided from the best sources, and effort is made to imbibe the spirit, the joy and the purpose of the author and recreate them to socia' ends.

Lessons are of two types; the silent or preparatory, and the oral or dramatic. In the primary grades both are usually accomplished in the same lesson period

Silent Reading. Silent or preparatory reading is for the purpose of clearing up word difficulties, getting meaning from the printed page, and its oral reproduction, together with some oral reading for the purpose of clarifying ideas. It serves the purpose of training children *how to study*. Silent reading should be an important feature of the work for several reasons: (1) outside of the schoolroom reading is almost entirely silent, and children should acquire the habit of intelligent and sufficiently rapid silent reading, (2) if silent reading leads to questions on the part of children, or to constructive thinking, this is better proof of mastery of the thought than is often afforded by oral reading, (3) the ambitious child is given an opportunity to read more than he otherwise might, and the slower child is stimulated to increase his pace as measured by himself (4) the spirit of quiet, and the respect for the rights of others is inculcated. The Pleasure or Voluntary Reading, therefore, furnishes an excellent opportunity to train in good library habits established in silent reading periods. Children of third and fourth years should also be encouraged in home reading by the use of school library books and additions to the home library.

Oral Reading. Oral or dramatic reading is a necessity in primary grades. Young children are instinctively dramatic, and live in a make-believe world and reading offers a fertile field for the cultivation of this power. Words take on a new life and meaning when once the thought is mastered and made real through dramatic action, and reading becomes a delight. A new relation is established through a real social situation which changes the whole attitude toward reading drill and reading. The consciousness of an audience and the desire to *be* the character in the play aids the speaking voice, strengthens clear distinct utterance, leads to self-forgetfulness, and secures the undivided attention and interest of all. A proper posture is more easily secured by which to maintain an alert

mental attitude; and poise, ease, and control are established with comparative ease in this pleasant social relation. Facing the audience is felt by the children to be as essential as it is natural.

Since reading is primarily a social exercise many opportunities in the classroom and in the school are utilized to stimulate motives governing the desire to read aloud. The following are suggestive:

a. To give information from a book not in the hands of the other pupils: "Playing audience."

b. To give pleasure to self and to others: "Playing book," or "Dialogue reading."

c. To dramatize as one reads, or to read while others dramatize: "Dramatic reading."

d. To prepare for special occasions: Morning exercises, assemblies, festival days.

e. To read occasionally to another class in school.

f. The organization of a Reading Club, or a Dramatic Club or a Story-Telling Club. (A club of this nature can be organized with pleasure and profit in the fourth year, and possibly in the third, as a means of stimulating expressive oral rendition.)

Corrections and criticisms of reading should be made by both teacher and children, taking the form of a *judgment* passed upon the effort. If a problem is set which involves thinking and therefore better interpretation, criticism can be carefully and wisely directed which will avoid rehearsal of non-essentials or aimless fault-finding. Be definite, to the point, and detailed. Commend good points, and justify both favorable and adverse criticism.

A widespread interest in measurement in education aids in establishing standards in reading, as well as in arithmetic or spelling. "The increase in mastery of technique means a result in the attainment of a proper degree of skill. The work to attain a result varies with each child, but the result shall be the same with each child. Uniformity of result is the chief characteristic of successful teaching."—Courtis. Individual differences make it impossible for all to attain the score of the highest, but there is a common, normal standard attainable by the majority. Tests aid teachers in determining standards, and the following are recommended:

a. A vocabulary test for the first and second grades.

b. A speed test for determining the reading rate of the class.

c. A test determining retention of content for third and fourth grades.

To meet the variation in reading ability group-work is invaluable, and an attempt should be made to meet the needs of children through

a specific set of drills designed to correct their personal shortcomings and to bring them up to grade. Children grouped according to the common failings can be given definite aid in class periods and in the Library Hour. Self-organized groups under the leadership of a strong, capable member of the class or an eighth grade student whenever available should be fostered and encouraged.

Seatwork. Seatwork in connection with reading should consist of such expressive work as serves to clarify thought-content. Training the child *how to study reading* is the aim. Independence on the part of the worker is the goal desired. In primary grades, the needs and capacities of children demand work which will aid in the growth of the vocabulary, and in the ability to get thought from the printed page with ease. Seatwork then should emphasize both form and thought-content through word-study and simple problems based upon the lesson material, using handwork as a necessary and useful agent when words and ideas can be strengthened thereby.

REFERENCE BOOKS: Briggs and Coffman, *How to Teach Reading,* Row, Peterson & Co.; Huey, *Psychology and Pedagogy of Reading;* Klapper, *Teaching Children to Read,* Appleton; Chubb, *The Teaching of English,* Macmillan; Sawyer, *Five Messages to Teachers of Primary Reading,* Rand, McNally Co.; Jenkins, *Reading in the Primary Grades,* Houghton, Mifflin & Co.

FIRST GRADE READING

Interesting material is the most important factor in teaching children to read. The work in story-telling, memorizing, dramatizing and conversations about familiar and interesting things in the child's experience furnish a splendid basis for first grade reading. Since the story, the song, the game, the occupation of the little child's day are but phases of one unity, the reading comes simply as another means of expression, and the teacher's preparation of lesson material preceding each lesson considers the material in relation to the child's growing capacity and lays a foundation for the use of the text which is to be placed in his hands.

Reading for the thought influences the child's attitude toward reading, as well as the manner of reading. Intelligent reading, oral and silent, depends upon getting the thought, fluent reading depends upon the habit of seeing more than one word at a glance. Thought is expressed in groups of words. A combination of sentence, word and phonetic methods, with constant use of the board, seems to be a rational method of procedure, and might be termed the natural method. The child experiences the fact from the beginning that *reading is a thought-getting and thought-giving process.* The analysis of the sentence gives the *phrase;* soon the analysis brings the *word,*

and later the final element, *sound*. This last is of great importance and value, as it gives the child the power to discover for himself words and sentences.

It will be observed that other lessons contribute to the reading lesson, and often, therefore, not all the steps occur at the reading period. There should be two reading lessons and one word drill or phonetic lesson daily, and as much incidental reading in connection with other activities as possible.

The first lessons are rhymes and cumulative tales, together with interesting everyday experiences, printed upon manilla tag board by the aid of price and sign markers, or written on the blackboard in large, round script. These are termed Language Reading Units. As soon as a sufficient vocabulary is gained the book may be introduced, and used interchangeably with blackboard reading lessons.

Time Allotment: Reading: including word study, phonetics, spelling. Recitation: Four 15 minute periods per day. Seat work: Three 15 minute periods per day. Total: 525 minutes per week.

Lesson Procedures

1. Study lessons with the teacher in class time.

2. Seat work based upon the story previously read with the teacher.

3. Silent reading based upon the familiar vocabulary of the text, changing the order of the sentences.

4. Oral or dramatic reading; reading and playing the story.

5. Oral reading to increase ease and fluency; review of old material arranged around some interesting center, as Kitty Stories, Bird Stories, Fairy Tales.

6. Lessons for quickening pace in reading familiar material:—

a. Use a review story. Teacher begins a sentence anywhere. Child who finds the place first, stands and reads.

b. Time the children to see how far they can read in a given number of seconds.

c. Time the children to see how long it takes to read a certain page.

d. Book closed over the finger. At a given signal, open and read until teacher says, "Close books." Each child tries to tell what his eyes caught during the second.

e. Use perception cards, phrase and sentence slips.

f. Often two or more kinds will be used in the same recitation.

Materials:

First Half Year

I. Some interesting nursery rhymes, stories, poems chosen from literature:

1. Nursery Rhymes: Jack and Jill, Little Bo-Peep, Little Miss Muffet, Robin Redbreast.
2. Repetition Tales: The Little Red Hen, The Three Pigs, The Pan Cake.
3. Finger Plays: The Family, The Beehive.

II. Some interesting everyday experiences:

1. Conversations about simple things in nature.
2. Conversations about children's games, toys.
3. Conversations about familiar occupations.
4. Stories told by the teacher. Dramatized, retold by the children.

III. Selected lessons from the Holton, Brooks', Summers', Reading Literature, Story Hour Primers; Progressive Road, Book One.

Method:

I. PRE-PRIMER WORK: LANGUAGE READING UNITS

First Step—The Oral Story. Hearing and telling the story.

Second Step—Playing and dramatizing the situations.

Third Step—Conversations upon which the mechanics of reading are based:—

1. Simple, brief, animated, interesting. Pictures, objects, drawings, used as aids.
2. Essential or suggestive thoughts recorded on the blackboard, in simple, brief, childlike terms. Children's responses to well formulated questions will be used, modified to fit the growing power of the class.
3. Recognition of the *sentence unity* is the first step. Read the sentence not word by word but as a whole. Develop the sentence sense first. The first sentences are often one word, as in action sentences. As soon as recognition of different sentences takes place words should be differentiated. Sentences should be written on the board in as perfect form as possible. Repeat the same sentence, the words, and phrases until familiarity is gained, remembering that the stimulus of interest lessens drill.
4. Observe this sequence:—sentence, word, phonetics, and letters.

Fourth Step—These simple language reading units may be mimeographed and incorporated in a first reading book for each child.

II. Book Reading Lessons

First Step—The Oral Story.

Second Step—The Dramatization.

Third Step—Conversation, coupled with blackboard work preparatory to the text:—

1. Sentences similar to those of the text, emphasizing certain words and phrases of the text.
2. Finding sentences, phrases and words in the text.
3. Word study: sight and phonetic.
4. Silent reading; sentences, paragraphs, pages worked through for thought, under teacher's guidance; thorough drill in glancing through the material; drill to increase speed.
5. Oral reading; gradually increasing from one sentence, to two or more, the paragraph, a part, and the whole story. Enough imagination stimulated through the pictures, the dramatization, the dialogue, to keep the story alive.

Fourth Step—Drills to secure word and speech control. Emphasize articulation, enunciation, and pronunciation:—

1. Drill on sight words, all words learned as wholes. The phonetic word is learned as a whole and later used as basis for introducing phonetic family.
2. Drill on phrases, to establish word relationships and phrase unity.
3. Drill on sentences, to give skill in fusing individual words of a sentence into a thought unity, e.g. "flash" sentences.
4. Drill on phonetics, to secure independent word mastery.

Devices:—word cards, phrase cards, sentence slips, in conjunction with the blackboard.

Games—of finding, showing, telling, racing, guessing, hunting, matching, grouping, making riddles.

Fifth Step—Seat work.

1. Illustration of story, sentence, word; using lentils, crayons, chalk, paper and scissors, folding, clay modeling.
2. Formal drawing—tracing pictures, coloring outline prepared by the teacher.
3. Rhythmical work—using lentils, sticks, seeds, leaves. Repeat the exercise in borders for rugs, wall-paper.
4. Matching—sentences, sentences and pictures, words and pictures.
5. Sorting—words and sentences; finding words alike, separating known words from unknown.

6 Dissected story; arranging the original story; arranging original sentences.

7. Letter cards: finding letters that are alike; finding letters whose sounds are known; building words when model is given; building words from memory; building original sentences.

8. Writing from copy: words that rhyme; sentence from the blackboard. Use blackboard freely.

WORD STUDY

Word study is a convenient term for the work with words presented in this grade. It includes the treatment of words as wholes, singly and in phrases; spelling; and drills for speech control. Such lessons may well take the form of lively, interesting games, the purpose being to secure instantaneous recognition and recall of a suitable stock of sight and phonetic words acquired in the reading.

I. Word Drills

1. Repetition of sight words selected from reading lessons.
2. Phrase and sentence work to increase reading pace, by training the eye.
3. Devices: blackboard, word cards, phrase and sentence slips.
4. Games: competitive and time tests.

II. Phonetics

Aim: By the end of the first six months in school children should be able to attack new words in the reading by thinking in order the sounds of their separate letters and blending them into the word. Preparation and drill at first will not be in connection with the reading lesson proper. Word building may be begun as soon as the child has learned enough sounds. Application of phonetics to the reading may be begun as soon as the child knows the written symbol in words for the separate sounds he has been learning through ear and lip.

Material:

1. Sounds of consonants and short vowels; phonograms with short vowels developed from sight words in relation to the thought content of reading lessons.
2. *See and Say*, Book One, a guide for the teacher.

Method:

1. Observe the following order, presenting the sounds and letter names simultaneously through names and pleasant associations: f, s, t, p, c, h, m, r, w, b, k, l, j, n, d, q, v, x, y, a, e, i, o, u.
2. Ear training. Pronounce simple words slowly until children recognize initial and final consonants taught; the phonograms.
3. Ear and eye training. Words written on board; initial sound given, the phonogram developed from sight words.
4. Printed lists of words for each child, if possible. A chart or list on blackboard kept for drill.
5. Individual and some concert work, e. g., all sound, one child name, and vice-versa.
6. Beginning to apply phonetics. Through words of reading lessons lead children to recognize the known sounds, initial and final consonants, and then the elements in the phonogram.
7. Games to give variety in drill.

III. SPELLING

1. Word study—of words, phonetic and other groupings, in relation to reading and other studies.
   a. Recognition by use of perception cards, blackboard drill.
   b. Games—finding, telling, showing, racing, testing.
2. Sight spelling. Begin with one word.
   a. Present the word, writing in full, large script on blackboard.
   b. Children concentrate upon the word picture. Erase the word.
   c. Children write, preferably at board. Correct any error by presenting the word whole again.
3. Reviews. Weekly recall of the five words presented during the week. Spelling and phonetic booklets, made at first by the teacher, later by the children, to aid in monthly review.
4. Dictionary making. Word collections made according to various criteria; phonetic, alphabetical, other groupings.
5. Writing words that rhyme, at least two. As much blackboard work as possible.

At the end of the First Half Year the children should be able to read simple sentences, as wholes, but not word by word, from both blackboard and primers. Fifty lessons from the primers is the *minimum* amount. Short vowel sounds, and all consonants, should be known; the recognition of some phonograms, and word-making from these phonograms is essential. The child's name, a word vocabulary and simple sentences should be written from copy.

NOTE: Children whose progress has been unsatisfactory should be given an opportunity to repeat the work at this time.

Second Half Year

Material:

Interesting material selected from the content-subjects: literature, nature study, history—

1. Language Reading Units: Emphasis on history and nature study in blackboard reading lessons.

2. First Readers: Story Hour, Book One; Progressive Road to Reading, Book One; Summers' First; Riverside First; Reading Literature, Book One; Bass' First Reader.

Correlate the reading material with the center of interest, whenever possible. Exercise discrimination and judgment in choice, avoiding an accumulation of difficulties by development on the blackboard.

3. Supplementary Readers:
   a. Class Library.
   b. School Library. See Voluntary or Pleasure Reading List. (See pp. 32–38.)
   c. Circulating Library. (See pp. 31–32.)

First Grade B.: Aldine Primer, Bryce; *Heart of Oak Books,* I., Norton; *Outdoor Primer,* Grover; *Sunbonnet Babies Primer,* Grover; *Reading Literature Primer,* Free and Treadwell.

First Grade A.: Aldine First Reader, Bryce; *Busy Brownies,* Davidson and Bryce; *Children's First Story Book,* Wood; *Child Life First Reader,* Blaisdell; *Progressive Road to Reading,* Book I; *Reading Literature First Reader,* Free and Treadwell; *Riverside Reader,* Book I; *Summer's First Reader.*

Method:

I. Language Reading Units

First Step—The oral story. Hearing and telling the story. This may often be the history talk, or report of nature observations, as well as the story in literature.

Second Step—Playing and dramatizing the situations.

Third Step—Conversations upon which the mechanics of reading are based.

1. Brief, animated, interesting; make use of illustrative material.

2. The teacher records upon the board the essential thoughts of the conversation lesson in brief, child-like terms, often using child's sentences, but modifying them to fit the capacity of the class. Previous preparation of the lesson whole is essential to obtain correct form. Correct placing of title, of paragraphs, proper spacing and perfect writing, are essential to formation of good habits.

3. The blackboard lesson should contain at least ten coherent sentences. Recognition of the sentence unity continued with increased power in expression. Meet all difficulties of blackboard lesson, as well as book lesson, by study with the children.

Fourth Step—Study.

1. Drilling on phonetic words; difficult sight words.

2. Drilling on phrases for smoothness.

3. Reading in answer to questions, sentence by sentence around the class.

4. Reading the parts and whole.

5. Silent reading at seats. Taking primers and finding script words—in print.

II. Book Reading Lessons

First Step—Supplying the motive, or incentive for discovering thought.

Second Step—Silent reading in answer to questions.

Third Step—Conquering difficulties.

Fourth Step—Oral or dramatic reading.

1. One or more sentences at a time in answer to questions; a paragraph; a part of story; the whole story. Dramatize.
2. Glancing through the sentence silently, avoiding lip movement. Reading aloud, facing the audience.
3. Change position of class often, to test carrying power of voice; to develop social relationships.
4. Train children to hold book properly, to stand well and to breathe deeply by closely relating reading and dramatic effort.
5. Teacher read to children occasionally.

Fifth Step—Seat-work. Continue work of First Half Year. As much blackboard work as possible. In addition:

1. Copy class story, occasionally as one sentence, or an elliptical sentence.
2. Reproduce a sentence after erasure.

WORD STUDY

I. Word Drills

Repetition of sight words selected from reading lessons. Phrase and sentence work to increase reading pace by training the eye.

Devices: blackboard, word cards, phrase and sentence slips.

Games: simple competitive tests and time tests.

II. Phonetics

Aim: To train children to *hear* sounds and to reproduce them accurately, to recognize them in written and printed words.

Material:

1. Review of sounds previously given. Fix the following: g, j, l, n, d, v, x, y; th, sh, wh, fl.
2. Phonograms—which grow out of reading lessons, as ed, at, ing, oy, ow, etc. Building and blending short vowel phonograms.
3. *See and Say*, completed.

Method:

1. Ear and eye training—continued.
2. Visualizing: cards, charts, blackboard lists.
3. Phonetic books made by children; class held responsible for words.
4. Making word lists independently.

III. Drills for Speech Control

1. "Simple breathing exercises.
2. Practice in pronunciation of words, pausing slightly on syllables.
3. Practice in pronunciation, articulation, ĭ, ĕ, ă, ā, ī, ä, ō, in connection with consonants.
4. Articulation of initial and final consonants, as p, t, d, b, s, m, n, g.
5. Jingles repeated to increase flexibility and strength of lips and tongue."
6. Rhythmical oral spelling.

7. Individual work to correct speech defects, and words commonly mispronounced.
8. Use lively, interesting games.

IV. Spelling

1. Word Study:—phonetic and other groupings, as suggested by the reading material and other studies.

a. Drills for rapid recognition of words, phrases, sentences by use of perception cards, blackboard, and books.

b. Lists made by children, copied and illustrated: at first, from models, then, independently.

2. Sight spelling:—two words, increasing to four. Present each word upon blackboard. Sharp visualization with keen concentration on part of children. Erase. Children write word at blackboard. Errors corrected by presentation of correct form again. Test by recall at seats.

3. Dictated:—Review words presented in study spelling in the following ways: recall the difficult word of yesterday, give weekly and monthly reviews of the list given; study of the entire list of words, and dictate. Test by recall at seats, recording in spelling booklet.

4. Oral:—Rhythmical work, chiefly, based upon the phonetic families. Name the words, sound the elements, name the letters. Emphasize rapid mechanical drill around the class. Secure automatic response by securing co-ordination of eye, ear and voice.

5. Dictionary Making. Word collections made according to various criteria: phonetic, alphabetical, and other groupings. Spelling booklets made monthly. A list of about 125 words may be entered alphabetically in a book as each word is presented during the year, or a printed *dictionary* containing the entire list may be given each child in April as a summary of the words given throughout the year.

SUGGESTIONS FOR READING SEATWORK

I. Form

1. Illustrative handwork whenever the occasion offers fruitful results, e. g.:

a. Modeling—as squirrel.
b. Cutting—Baby's playthings.
c. Drawing—The Little Red Hen.
d. Folding—Barn for the horse.
e. Sticklaying—Forest and Home of Three Bears.
f. Tablets—Chairs, trains.
g. Rhythmical work with units suggested by the lessons, using cutting, drawing, sticks, tablets, lentils.

2. Making pictures with lentils, corn, or other seeds.
3. Cutting out pictures to illustrate words, as hat, dog, cat, apples.
4. Making words with lentils, corn, or other seeds.
5. Making words and pictures with lentils, corn, or other seeds.
6. Arranging word lists with small word cards from copy; later without copy.
7. Arranging word cards and card pictures.
8. Arranging sentences and phrases; illustrating from copy; later without copy.
9. Arranging dissected stories; sentences in order given, sentences in different order.
10. Making words, phrases, sentences, with letter cards.
11. Writing words, phrases, sentences from copy.

12. Illustrating words, phrases, story.
13. Making phonetic lists; from copy; later without copy.
14. Copying from print—words, phrases, sentences.
15. Finding phonograms in words: laying with letter cards the word and the phonograms.

II. THOUGHT-CONTENT

1. Illustrative handwork when it aids in clarifying thought, or increases interest in reading material.
2. Find the sentence liked best. Use letter cards, write or illustrate.
3. Find a question in the story. Write it. Write another question like it.
4. Write one story or sentence about the picture.
5. Use letter cards, and make story about someone or something in the reading lesson.
6. Close the book. Write one thing you learned from the reading lesson.
7. Copy sentences chosen by teacher and children from lesson.
8. Copy the class story, occasionally, one sentence, or an elliptical sentence.

At the end of the First Year the children should be able to read with ease from any of the books listed for the First Grade; should be able to recognize the phonograms in common use; should be able to recognize the words of the vocabulary test singly and in sentences. Oral and written spelling of the phonetic families and the spelling vocabulary of one hundred twenty-five words should be accomplished with ease.

SECOND GRADE READING

"Pupils should read for the same reason as adults, that is, because they are interested If the work of the first year is skillfully done and a supply of suitable books is at hand, children will do so." The first year's work aims to lay a foundation for independent word-mastery without sacrificing the child's joy in reading, through emphasis upon the mechanics together with training in the habit of looking for the thought and giving it expression. The second grade work continues this by insisting that a child shall use all the knowledge and power he has in finding out a sentence for himself after the means have been provided. The conquering spirit is instilled, by the right presentation of material that is worth while in both first and second years. Worthless material destroys the motive and kills the joy of learning to read. "The business of the teacher is to relate reading properly to the other activities of the school,". . . the nature observations, the history and literature, and to guide the children, under this stimulus, in forming good reading habits. "Discriminating use should be made of the blackboard, printed slips, mimeographed lessons and a variety of reading books."

There should be both silent and oral reading procedures though usually both are used in the same recitation:

(1) The silent reading or preparatory work gives opportunity for drills to eradicate difficulties, for testing thought-getting through reproduction, for various kinds of seatwork, and for quickening reading pace. (2) "In the oral work distinctness, appropriate expression, pleasing tone of voice should be secured." There should be simple game drills to strengthen speech control, enough stirring of the imagination through pictures, dramatization, conversation, to keep the contest alive; there should be opportunity for the child to hear good reading from the teacher, and from other classes to give ideals for him to imitate.

Reading is primarily a social exercise and many opportunities in the class room and the school should be utilized to furnish rational motive for further drill, as "Playing Book," "Dramatization," "Playing Audience," "Reading to Other Classes" and at School Assemblies. The success of the work is measured not by the number of words which a child knows, nor the number of books he has read, but by the ease with which he attacks new material.

Time Allotment: Reading, including word study, phonetics and spelling. Recitation: Four 15 minute periods per day. Seat-work: Three 15 minute periods per day. Total: 525 minutes per week.

Material:

Reading related to history, nature-study, literature, wisely adapted to the children's needs and interests.

1. Language reading units. Blackboard lessons or mimeographed slips.

2. First Readers: Selected lessons in the *second* half of First Readers should be briefly reviewed by correlating with the other activities of the school.

3. Second Readers: Selected lessons from Riverside Second Reader, Stepping Stones II, Progressive Road, Book II, Reading Literature Book II, Summers Book II.

4. Supplementary Readers: Fishing and Hunting; Hiawatha Primer.

5. Class Library.

6. School Library: See Voluntary or Pleasure Reading Lists for First and Second Grades; pp. 32-38.

7. Circulating Library: (See pp. 31-32.)

First Half Year: Aldine Second Reader, Bryce; *Child Classics Book*, II, Alexander; *Eugene Field Reader*, Field; *Folklore Stories*

and Proverbs, Wiltse; *Goody Two Shoes,* Welsh; *Rhymes and Stories,* Lansing; *Seaside and Wayside,* Wright.

Second Half Year: Bow Wow and Mew Mew, Craik; *Children of the Cliff,* Wiley and Edick; *Fox's Indian Primer,* Fox; *In Mythland,* Beckwith; *Riverside Second Reader; Summers' Second Reader.*

I. Language Reading Units

Material:

Stories and simple, interesting summaries gleaned from history, literature and nature.

1. Oral work precedes. Language reading units are based upon some phase of a content subject, the essential thought being recorded in natural, child-like terms upon the board. This may be the *class-story* to which the children contribute; it may be wholly constructed by the teacher, and, occasionally, the independent oral or written work of children may be used.

2. The teacher's preparation makes it possible for her to organize the material given by the class in response to her logical sequence of questions, into a co-ordinated, attractive whole. Good structure and form are observed in title, paragraph, and the sequence of sentences. These reading lessons may be mimeographed and incorporated in a reading book for purposes of review.

Method:

1. Motives for reading the class story: to find better ways of stating what is known; to enjoy the result of the creative effort.

2. Eradication of difficulties by enough word, phrase and sentence drill to insure smoothness, facility and ease.

3. Expression secured by stimulating questions, and by imitation of teacher and good readers in the class.

4. Seat work. Illustrating, copying or modifying a part of the class story; or word study.

II. Book-reading Lessons

1. Material selected to emphasize some point in a content subject, correlating with history, literature, nature, and other school subjects.

Method:

1. Motive supplied; reading in answer to some felt need.

2. Silent or study reading, eradication of difficulties accomplished in part by the language reading unit, by word study, and enough drill to insure smoothness, facility and ease.

3. Oral reading: expression secured by stimulating questions, by setting ideals for imitation.

4. Seat work: emphasizing word study or content.

WORD STUDY

Word study is a convenient heading for several different aspects of the work with words. In the second grade this includes (1) training in visualization by the use of perception cards, blackboard lists, phrase and sentence slips, (2) phonetics and spelling and (3) additional exercises by which to gain better speech control, emphasizing enunciation, pronunciation, and good voice tones.

1. Word Drills

1. Increase the vocabulary through repetition of sight words selected from reading lessons; through word building, phonetic and other criteria.
2. Phrase and sentence work to increase reading pace by training the eye.
3. Devices: blackboard, word cards, phrase and sentence slips.
4. Games.

II. Phonetics

A judicious use of phonetics is made a basis for gaining word control, though its exclusive use is not recommended. Silent phonetic analysis should take the place of oral analysis as soon as possible, and should be consciously continued throughout the primary grades. The work in phonetics should result in (1) good articulation; (2) independent power to call new words.

Material:

1. Review sounds of consonants and short vowels; simple phonograms.
2. Long vowel sounds. Simple phonetic laws for long and short vowels. Suffixes *—ing, ed, er, est.*
3. Building and blending words of short and long vowel sounds.
4. Selected words for daily drill in enunciation and pronunciation. Reference: *See and Say,* Book II.

Method:

1. Drill on consonants and phonograms from charts and blackboard. Games.
2. Familiar word presented, analyzed into its parts, building other words upon the phonetic syllable, or, making rhyme words.
3. Phonetic lists recorded in books for this purpose. Children held responsible for the work presented.
4. Developing the rule which is to be memorized.
5. Use of words in phrases and sentences.
6. Daily applications in reading.

III. Drills for Speech Control

1. "Simple breathing exercises.
2. Practice in pronunciation, using the list of words commonly mispronounced by the class group.
3. Articulation of consonants and molding of vowels by securing open throat, proper use of lips, tongue and teeth.
4. Jingles and simple poems used to improve flexibility and strength of lips and tongue."
5. Syllabication of words; oral spelling.

IV. Spelling

"Accurate imaging of words, correct pronunciation and graphic expression are the essential factors." Oral spelling of simple familiar words should become automatic, and accompany written work. The choice of words is determined by those most common to the child's speaking vocabulary, those longest known and most commonly used, and they will be presented as the needs for them arise in connection with language and reading. Not more than five words daily should be given, and of those, two should be review. The grade list consists of 250 words in addition to the 125 of first grade. A second grade pupil is held responsible for 375 words.

Material:

1. Phonetic lists, with suffixes, *s, es, d, ed, er, est, ing.*
2. Word collections according to various criteria.
3. Words most commonly used in daily work.
4. The grade list, which includes basic words from (1), (2), (3).

Method:

1. The Study Lesson.
   a. Pronounce the word; write on the board; erase.
   b. Children record at board or on paper. An error is corrected by giving the right form again.
   c. Continue until all the words are presented and recorded.
2. The Study Lesson.
   a. Pronounce the word or phrase distinctly as you write. Children visualize quickly and accurately.
   b. Oral spelling of word or phrase with class watching.
   c. Find parts already known. Show difficult parts.
   d. Continue until all the words are presented in the same way.
   e. Compare words to find similarity and difference.
   f. Dictate.
3. Dictation or Testing Lessons. Each study lesson is followed by some form of testing.
   a. Dictation: column, phrase, and sentence. Work at blackboard indispensable.
   b. Independent work: making phonetic lists; placing words in association; language work.
4. Methods of Correcting Work.
   a. As children work at board the teacher notes the error at once, erases the incorrect form, writes the word, and again the child and the class visualize the correct form, writing the word correctly.
   b. Checking work at the end of the dictation exercise. The correct form is placed upon the board; the child makes his correction, writing the correct form at one side.
   c. Placing upon the board the words misspelled by the majority, and asking children to find their own errors. Exchange of papers may be made occasionally.
   d. Teacher checking work and reporting to the class indicating the class and individual rating by some simple graphic representation.
   e. Dictionary making. Word collections according to various criteria: phonetic, alphabetical and other groupings suggested by subjects studied. Use as needed to prevent and check incorrect spelling.

5. Socializing the lessons:
   a. Games, contests.
6. Standard tests: Buckingham, Ayres.

SUGGESTIONS FOR READING SEATWORK

Much of the work done in First Grade may be extended and continued in Second Grade, placing more stress upon independent effort.

I. Word Study

1. Illustrative handwork continued and extended:
   a. Sketches of incidents, happenings, etc., emphasizing action and detail.
   b. Modeling, cutting, drawing.
   c. Rhythmical work with units in cutting, drawing, sticklaying, tablets.
2. Letter cards, early in year making words, phrases, sentences from copy; without copy. Work for unity and coherence in sentences around a theme.
3. Written: Phonetic lists suggested by the reading lesson.
   a. Words belonging to a phonetic family, as *ad*.
   b. Words beginning with a certain phonogram, as *ch*.
   c. Words ending with a certain phonogram, as *sh*.
   d. Words with long vowels; short vowels.
   e. Words with simple suffixes, as *ed, ing, est*.
   f. Listing phonograms and words in which they occur: as *ave*—slave, *unt*—hunt, *ent*—went.
   g. Illustrate whenever possible any of the above.
4. Word associations of various criteria:
   a. Suggest one word. Class make list of all words which come to mind. Copy from blackboard. Children make list independently.
   b. Words which describe a horse, a day, a leaf.
   c. Words which tell action.
   d. Words which name objects, persons.
   e. Guide words or important words in a lesson.
   f. The "connecting" words in a lesson, in phrases.
   g. Find a word. Find another which means the same, as *little, tiny, small*.
   h. Illustrate all word lists whenever possible.
   i. Use in phrases; in sentences; in paragraph. Emphasize unity and coherence. Avoid the isolated, unrelated sentence.
   j. Elliptical words; omitting vowels, not consonants.

II. Thought-Content

1. Copy from blackboard the class story; the poem; a child's oral composition which has been recorded by the teacher. Illustrate often.
2. Copy from book the sentence or sentences liked best; the paragraph liked best; the paragraph which tells you something new. Illustrate often.
3. Copy the exact words of a character in the story.
4. Copy the paragraph which describes something; which asks something; which is funniest; in which the words please you most.
5. Write the questions asked in lesson; ask one more.
6. Answer questions placed on board; in exact words of book; in child's own words.
7. Write the main points in each of the three paragraphs; in the story.
8. Name the characters. Choose one liked best and write about it.

9. Close the book. Write one thing you have learned from the lesson.
10. Elliptical sentences and stories suggested by the reading lesson.
11. Reproduce a part of such a story as "The Lion and the Mouse,"—(a) What the Lion Did or (b) How the Mouse Helped.
12. Illustrate work whenever possible to aid and clarify thought.
13. List unusual expressions, phrases, words to be used in sentences.
14. Copy a poem, or part of a poem; illustrate parts.

At the end of the Second Year, children should read with ease from any of the grade books, including those in the supplementary list; and show through the reading reasonable comprehension of the thought; should use phonetics with skill in discovering new words, and know two phonetic rules; should be held responsible for the words of the spelling lessons throughout the year, this being determined by dictation in lists and sentences, and in independent composition.

The equivalent of two Second Readers, one supplementary and one pleasure reading book, is the minimum requirement.

Children whose work is unsatisfactory in reading, spelling, or phonetics should be given an opportunity to repeat the work at this time.

THIRD GRADE READING

Much reading is a wise means for developing the power to read and creating a taste and love for good literature. By the end of the second year reading should have become a pleasure, and this reading-delight should be continued in the third grade through the extended use of worth while material, together with those aids which help the child to become almost or entirely independent. "The process of learning to read should be fairly mastered by the close of the third year."

Many different books " . . . are provided to give abundant experience in getting thought and conveying it," . . . and the teacher should see that the reading is closely related to the history, literature, geography, and nature study. The voluntary or pleasure reading should be encouraged through regularly appointed library hours, . . . "special pains being taken to put the simple and interesting book in the hands of the backward pupil,". . . and to give specific aid to individuals or small groups.

When supplementary matter is wisely chosen, it becomes the test of the development lessons. When it is too difficult, it must receive the same attention as any reading lesson. If children are permitted to acquire slovenly habits, through difficulties not properly presented, our work is faulty. Sight reading, therefore, should be easy material, occasionally; even then it should receive consideration in

presentation. Regular reading work, so-called, and supplementary reading should go hand-in-hand, throughout the year.

There should be both silent and oral reading procedures, though often both are used in one recitation:

The silent reading or preparatory work gives opportunity for drills to eradicate difficulties of vocabulary and speech control, for testing thought-getting through reproduction, for quickening the reading pace, for various kinds of seat work. The end now sought is fluency. Children soon show a marked advance (1) in the rapid recognition of words in phrases and sentences; (2) in their ability to look ahead, which results in their facility in reading groups of words at a glance; and toward the end of the year, (3) that habit of mind which finally leads to the grasp of a whole paragraph or page even, at a glance.

In oral reading stress should be laid upon the reading to a listening audience of selections by individual pupils and upon dramatic or dialogue reading. Since reading is primarily a social exercise every opportunity should be sought to provide motives which stimulate the desire to read aloud. Though silent rather than oral reading is the practice in daily life in this formative period the oral should be emphasized. Correct oral delivery constitutes the proof of the reader's understanding or lack of it, of the subject matter; it is the measure of his power and skill to give to others what he has gleaned from the text.

Variation in reading ability requires that specific remedies be applied to meet the variations in the needs of children. A careful analysis of the class based upon daily work, and tests of various kinds reveal the necessity for grouping children according to their common failings. The class is divided into two distinct groups according to ability, and while it is not advisable to change this order, yet the teacher should hold in mind those who need special help and center her attention upon them during the regular reading period, and in the library hour, in order to secure the desired uniformity of result.

NOTE: The required reading of a grade should be read by all pupils. This does not include all the supplementary material. It will sometimes seem advisable, with certain classes, to use books listed under lower grades.

Time Allotment: Recitation: Two 20 minute periods per day. Seat work: 20 minutes per day. Total: 60 minutes per day, or 300 minutes per week. Voluntary or Pleasure Reading: 30 minutes per week.

Material:

1. Second Readers. Lessons selected to meet the needs of a class for simple material correlating with other school activities. Recommended for use during the first six weeks of school.

2. Third Readers. Stepping Stones to Literature III; Riverside Third; Progressive Road to Reading, Book III. Lessons selected on the basis of their difficulty and correlated with history, literature, geography and nature study.

3. Supplementary Readers:

a. Class Library: In Field and Pasture; Fairy Stories and Fables; Nature Readers II; Docas; Five Little Strangers; Robinson Crusoe.

b. School Library: See Voluntary or Pleasure Reading List, Second and Third Grades; pp. 32–38.

c. Circulating Library. (See pp. 31–32.)

First Half Year: Animal Life, Bass; *Plant Life*, Bass; *In Mythland*, Beckwith; *That's Why Stories*, Bryce.

Second Half Year: Gulliver's Travels, Baldwin; *Old Greek Stories*, Baldwin; *Legends of Red Children*, Brooks; *Pioneer Stories*, Bass.

Method:

I. Reading Preparation, or Study Lesson

1. Motive supplied through an intellectual or emotional appeal to interest; the teacher giving the setting in a few words, or proposing a simple problem which the reading will solve.

2. Eradication of vocabulary and speech difficulties by using enough words, including both sight and phonic, phrase, and sentence drills to insure smoothness, facility and ease.

3. Silent reading to establish habits of thought-getting.

a. Reading sentences, paragraphs, parts in response to teachers' questions, aiming to get the essential facts of the whole unit.

b. Discussion of words and their meaning, of points that are confusing, of situations which bewilder, as an aid to clearer understanding.

c. Reproduction, to test thought-getting: reading parts in response to questions; oral telling.

In this grade this work may occupy a whole lesson period or only a brief part of it.

4. Seat work, emphasizing good reading habits.

II. Oral Reading

1. Motive supplied by the consciousness of an audience.

a. Child who reads facing the class. Children in seats should be trained to listen attentively by often closing the book.

b. Review of familiar material for special occasions.

2. Good expression secured by stimulation of the imagination through questions to bring out the meaning of the context.

a. Pictures and other illustrative material.

b. Imitation of the teacher's reading and that of the good readers of the class.

c. Dialogue, "Playing book." Dramatizing the lesson in part, or as a whole.

d. No interruptions for criticism. Reserve until reading is completed.

e. Teacher should not always follow the book. Test clearness and accuracy without the text.

3. Judge oral reading by:

a. Voice: loud and of proper pitch.

b. Clearness: articulation, enunciation, pronunciation.

c. Expression.

d. Reading rate.

4. Seat work: emphasizing habits of concentration in thought-getting.

Silent reading study to teach children to read independently. The following aids are suggested:

a. Questions on board as a guide to thoughtful reading.

b. Brief outline of story, given in sentence form.

c. Lists of different words, classes of words.

d. Writing a sentence, or paragraph, and illustrating it.

e. Answers to questions. Writing questions on text.

III. Voluntary or Pleasure Reading

1. Method of procedure: The library hour. See *Voluntary or Pleasure Reading*, pp. 32–38.

2. Two half hour periods per week.

3. Plan definitely to use some of the time in giving specific drills designed to meet the needs of small groups of children.

IV. Group Work in Reading

1. Group children according to their common failings. For suggestive grouping and specific remedial work, see Fourth Grade.

2. List the pupils according to their respective weaknesses and definitely work toward eradication of difficulties in the reading periods.

3. Organize small groups under the leadership of a strong, capable member of the class, or an eighth grade student whenever available.
4. Use a part of the time given to the library hour.

WORD STUDY

Word Study includes work with sight words and phonetic words, oral and written spelling, word building by use of the simple prefixes, and suffixes, practice in correct breathing, in correct use of the organs of speech, by which to gain better speech control. Slurring of words, mouthing, nasal tones need attention.

I. Word Drills

1. Sight and phonetic words growing out of reading and language needs. Rapid recognition and recall.
2. Devices: blackboard, cards, phrase slips.
3. Games: emphasizing time tests to increase accuracy and speed.

II. Phonetics

Systematic work with phonetics needs to be continued in this grade. "The acquirement of the pupils entering the class should be carefully estimated and a series of lessons planned to supplement and complete what has been begun." Phonetics must be used constantly as a means to word mastery by teacher and pupil, and as a means for better speech control.

Material:

1. Review difficulties met in Second Grade. Consult *See and Say* Book II, for suggestions.
2. Phonetic blends based upon words selected from reading lessons, and from *Phonetics for Schools* by Robbins.
3. Develop laws for *ai, ea, oa,* for *ar, alm, alf, awk, ast, ask, er, ere,* consonants before *e, i,* or *y.*
4. Prefixes and suffixes *un, an, in, on, dis, less, ness, ful, ly.* Review those listed in Second Grade.

Method:

1. Much of the work will be done in connection with reading preparation lessons, and as seat work.
2. Spelling lessons will often be phonetic in character.
3. Word building: uses of prefixes and suffixes as *un, on, less, ness, dis, in, ful, ly.* Review those listed in Second Grade.
4. Word making: use of a root word as a basis for word variations lying within the comprehension of the children.

III. Drills for Speech Control

1. Voice: Loud and of proper pitch.
   a. Breathing drills.
   b. Singing exercises, repetition of jingles, of poems, which give flexibility to lips and tongue.
   c. Imitation of teacher's well-modulated voice.
2. Clearness.
   a. Articulation; omitting sounds, as *pome* for *poem; singin'* for *singing;*

inserting sounds; as, *thingk, hurted;* slurring final letters, as *d* and *t*, in *He wen' away.*

b. Enunciation; wrong sound uttered, as *wery, vhich.*

c. Pronunciation; words commonly mispronounced.

3. Expression.

a. Imagination stimulated by questions, by imitation of others.

b. Dramatization.

Suggestions for Reading Seat-Work

The work may be extended and continued with profit in this grade as follows:

I. Word Study:

a. Phonetic lists:

1. Independently made, using suffixes and prefixes freely: as *ed, er, est, ly, ness, full, less, ing, ous.*

2. Use one word as a root word; find others that belong to this group; as *light, lights, lightning. lighting, delight, sunlight.*

b. Word associations based upon a given criteria:

1. Classifications, as thing and place, thing and time, thing and action, thing and shape, thing and color, thing and quality, thing and part, part and thing.

2. Classifications suggested by the lesson material.

c. Words meaning one; more than one.

d. Words forming plurals in regular ways—irregular ways.

e. Words—meanings given in one word, or phrase.

f. Opposites—*quality, action, name.*

g. Synonyms: *hot, torrid, warm.*

h. Words telling *how, when, where*; phrases telling *how, when, where.*

i. Words in phrases; copied from blackboard, from the book; elliptical; used in sentences, illustrated often.

j. Words in sentences—preferably a connected or logical group of sentences around a theme, making a paragraph unity; copy from blackboard; elliptical work; independent work.

k. Guide words in story; guide phrases; or those which are significant in the story. Copy from blackboard, write independently.

l. Lists of unusual expressions, phrases, words to be used in sentences.

II. Thought-Content:

a. Writing paragraph liked best. Illustrate.

b. Illustrating best point in lesson. Copy from book exact words; write independently the best point in lesson.

c. Copying conversation in lesson. Quotation marks.

d. Copying descriptive parts. Writing description in own words; as of a character; a scene; an act.

e. Copying interrogative, exclamatory, sentences. Change form to declarative.

f. Questions on board answered from text in exact words; in child's own words.

g. Questions on paragraph made by children. (Best put on board for class work, or used for query box.)

h. Reproduction of paragraph chosen by teacher or children.

i. Reproduction of the best part of the lesson.

j. Outline a lesson with its significant parts; copy from blackboard; make outline independently.

k. Outline a lesson; write another story something like it.

l. Complete a story, or change its ending.

m. Change a reading lesson from a narrative to a dialogue or drama.

n. Copy a poem, or part of a poem, illustrate parts.

o. Occasionally give such problems as "Why did you like this story?"

Compare the characters in two stories; give good points of each, differences, etc.

Compare two stories, noting differences, likenesses in scenes or setting, in plot, in characters.

At the end of the Third Year children should be able to read with intelligence from Third Readers and easy supplementary material, and attain the standard for the grade.

The equivalent of the Third Reader, two supplementary texts, including one book from Pleasure Reading List, is the *minimum* requirement.

In phonetics, they should know six simple rules and apply them.

Children who fail should be given an opportunity to repeat the work at this time.

FOURTH GRADE READING

Though the mechanics of reading are mastered by the end of the third year reading should still be carefully taught. Allowing a child to plod through sentences, paragraphs, and lessons without guidance is to foster gradual deterioration. The main work of the fourth grade is to provide such material and such motive that reading is still a delight. All work should aim to put the class into the atmosphere of the selection, so the reading will be ready, intelligent, and spirited. The study of new and difficult words singly and in phrases, should be continued as needed. Drill should be shorter and more pointed than in the preceding grades. More time should be given to discussion of content which helps in interpretation. "Conducting a reading lesson is conducting, controlling, shaping a process of thinking in the mind of each individual in the class. The author of the selection is in control of the thinking process. The teacher's value is measured by her power to help forward this thinking process."—Laing.

Both oral and silent reading procedures are continued, greater emphasis now being placed upon independent study in seat assignments, the recitation period being used for purposes of testing thought-getting through discussion and reproduction of the text; for quickening the reading pace and testing retention of content through time tests; and for oral reading.

The purpose and result of the work continued from the previous grade are many and very definite gains should be observed by the end of the year:

a. Development of thinking power.
b. Formation of good habits of study.
c. Appreciation of good literature; development of taste.
d. Cultivation of worthy social motives.
e. Training in the acquisition of knowledge from the printed page.
f. Training in pleasing oral reading.

Voluntary or Pleasure Reading assumes significance in this grade and pupils are encouraged to read and report upon books in connection with history, geography and nature, as well as stories for enjoyment. Give the impulse to each boy and girl to read at least two good, wholesome books outside of school this year. What the child learns to love to read and what he chooses to read are important things.

While silent reading is practised in daily life almost to the exclusion of oral rendition, yet the training in creative thinking should be given opportunity for expression in giving pleasure to others. Reading to a listening audience, training pupils to *hear* as well as to read, is important and to this end dramatic or dialogue reading should be continued.

Uniformity of result is desirable but is attainable only by a careful diagnosis of the causes of variation in reading ability and applying specific remedies according to the varying needs of children. Group work in reading should receive special emphasis in this grade. Select material suited to the needs of individual children and determine a procedure which will by persistent effort raise the standard of the class.

"The material for this grade should be mainly literary,". . . though much should also correlate with history, geography, and nature study. "One of the chief aims should be to teach how to study a book so as to grasp its essential meaning."

NOTE: The required reading of a grade should be read by all pupils. This does not include all the supplementary material. It will sometimes seem advisable, with certain classes, to use books listed under lower grades.

Time Allotment: Recitation: 25 minutes per day; 125 minutes per week. Seatwork: 25 minutes per day. Total: 250 minutes per week. Voluntary or Pleasure Reading: Two half hour periods per week.

Material:

1. Third Readers. Recommended for purposes of review during the first six weeks of school. Lessons selected to meet the needs of a class for simple material which correlates with other school activities.

2. Fourth Readers. Stepping Stones to Literature, IV; Riverside IV; Progressive Road to Reading, Book IV.

3. Supplementary Readers.

a. Class Library: *Every Day Life in the Colonies*, Stone and Fickett; *Seven Little Sisters*, Andrews; *Alice in Wonderland*, Carroll; *Short Stories of our Shy Neighbors*, Kelly; *The Beginners' American History*, Montgomery; *Home Geography*, Tarr and McMurry; *In the Days of Giants*, Brown.

b. School Library: See Voluntary or Pleasure Reading List. (Third and Fourth Grades, pp. 32–38.)

c. Circulating Library: Any set in Third Grade list not read by class during the previous year. (See pp. 31–32.)

First Half Year: Fairy Stories, Andersen; *Old Greek Stories*, Baldwin; *Viking Tales*, Hall.

Second Half Year: America's Story for America's Children, Pratt; *At the Back of the North Wind*, McDonald; *In the Days of Giants*, Brown; *Fifty Famous Stories*, Baldwin; *Historical Plays for Children*, Bird and Starling.

Method:

I. Silent or Study Lesson

1. Motivation through an intellectual or emotional appeal to children's interest; setting a problem which the reading will solve.

2. Vocabulary and speech difficulties met by word and phrase drills.

3. Silent reading.

a. In response to teacher's questions which aim to stress the essential facts of the whole unit.

b. To determine the outline or plan of the story, to find the parts, and name them.

c. Discussion of words and their meaning, of points that are confusing, of situations which bewilder, as an aid to clearer understanding.

d. Reproduction, to test thought-getting; reading orally parts indicated by questions, by outline.

e. Speed tests, to determine reading pace and ability to gain thought-content.

f. Seat assignment.

II. Oral Reading Lesson

1. Motive supplied by the consciousness of an audience.
   a. Child who reads facing class. Children in seats trained to listen attentively by often closing the book.
   b. Review of familiar material for special occasions.
2. Good expression secured by stimulation of the imagination.
   a. Pictures and other illustrative material.
   b. Questions to bring out the meaning of context.
   c. Imitation of teacher's reading and good readers of class.
   d. Dialogue, "Playing Book," Dramatization of the lesson in parts. "Playing Audience."
   e. Reserve criticisms until reading is completed.
   f. Teacher should not always follow the book. Test clearness and accuracy without text.
3. Judge oral reading by:
   a. Voice; loud and of proper pitch.
   b. Clearness: articulation, enunciation, pronunciation.
   c. Expression.
   d. Reading rate.
4. Seat-work emphasizing habits of concentration in thought-getting through silent reading and composition. See *Suggestions for Reading Seatwork*, p. 24.

III. Voluntary or Pleasure Reading

1. Method of procedure. See *Voluntary or Pleasure Reading*, pp. 31 32.
2. Two half hour periods per week.
3. Plan definitely to use some of the time in giving specific drills designed to meet the needs of small groups.

IV. Group Work in Reading

Variation in reading ability due to the variation in the needs of children should be clearly defined and specific remedial work applied. Individual attention is the best means in many instances but in large classes it is economy of effort to group children according to their common failings. Careful diagnosis reveals four groups.

1. Suggested grouping. (Klapper.)
   Group I. Children who lack the power to recognize words.
   Group II. Children who lack the power of comprehension.
   Group III. Children who lack in expressive and convincing oral rendition.

Group IV. Children who lack in clearness of speech, in articulation, enunciation.

2. Remedial work:—

For the first group, such work as the following:

a. Phonetic analysis, blends, word study, phrasings, for smoothness.

b. Reading of single sentences and paragraphs in answer to stimulating questions.

c. Silent reading and *telling* the story.

For the second group, stress concentration of effort:

a. Train child to listen; all books closed except that of the pupil who is called on to read. Test thought-getting by reproduction of paragraphs and parts of story; by thoughtful criticism of the rendition of the text.

b. Silent reading; each child reads a different book, as in Voluntary or Pleasure Reading, and prepares to *tell* or read the most interesting part of the story.

c. Interpreting the story through dramatic effort, as one reads.

For the third group:

a. Dramatic reading, each child dramatizing the thought according to his own interpretation.

b. Stimulate effort by competitive tests in which judgment is exercised by the class, as in sending a representative to a first or second grade to read to them a familiar fairy or folk tale.

For the fourth and last group:

a. Drills for speech control.

b. Dramatic work, without the text, and later, reading from the text combined with the dramatic effort.

c. Stimulation by means of competitive tests.

3. When to do this:

a. List the pupils according to their respective weaknesses and definitely work toward eradication of difficulties in the reading periods.

b. Use a part of the time given to the Library Hour.

c. Self-organized groups under the leadership of a strong, capable member of the class, or an eighth grade student whenever available.

d. Stimulate home reading with a definite end in view, securing the cooperation of both pupil and parent.

WORD STUDY

Occasional instruction in phonetics and persistent effort to secure good pronunciation by training the ear constitute one phase of the work. Oral and written

spelling, including the meaning of words and their correct use as determined by actual needs, in written composition; and drills for speech control are continued as in previous grades.

I. Word Drills

1. Sight words and phonetic words in relation to reading lessons continued when necessary.
2. List of words commonly mispronounced; drill upon a *few* at a time.
3. Syllabication emphasized.
4. Meaning of words; synonyms.
5. List of words commonly misspelled.
6. Word building. See Spelling, pp. 141–147.

II. Phonetics

1. Review all rules previously given.
2. Drill upon listed words for clear enunciation, and open tones, as well as for purposes of word mastery.

III. Drills for Speech Control

1. Voice: Loud and of proper pitch.
   a. Breathing drills.
   b. Singing exercises; repetition of jingles as "Peter Piper," "Betty Botter;" of poems, of prose, which give flexibility of lips and tongue.
   c. Imitation of teacher's well-modulated voice.
2. Clearness.
   a. Articulation of words commonly mispronounced; omitting sounds, as *goo'bye* for *goodbye*, inserting sounds, as *thingk*, *drownded*, slurring final *d*, *t*, *g*, *as*.
   b. Enunciation: wrong sound uttered, as *wisit* for *visit*, *wite* for *white*.
   c. Pronunciation: words commonly mispronounced by the group.
3. Expression.
   a. Dramatization.
   b. Creative thinking stimulated by questions.

Suggestions for Reading Seatwork

Much of the work begun in previous grades may be extended and continued with profit, as an aid to silent reading.

I. Word Study

1. Phonetic lists:
   a. Independently made, using suffixes and prefixes freely: as *ed*, *er*, *est*, *ly*, *ness*, *ful*, *less*, *ing*, *ous*.
   b. Use one word as a root word; find others that belong to this group; as *light*, *lights*, *lightning*, *lighting*, *delight*, *sunlight*.
2. Word associations based upon given criteria:
   a. Classifications, as thing and place, thing and time, thing and action, thing and shape, thing and color, thing and quality, thing and part, part and thing.
   b. Classifications suggested by the lesson material.
3. Words meaning one; more than one.
4. Words forming plurals in regular ways; irregular ways.
5. Words: meaning given in one word, or phrase.

6. Opposites: *quality, action, name.*

7. Synonyms; *hot, torrid, warm.*

8. Words telling *how, when, where;* phrases telling *how, when, where.*

9. Words in phrases; copied from blackboard, from the book; elliptical; used in sentences; illustrated often.

10. Words in sentences: preferably a connected or logical group of sentences around a theme, making a paragraph unity; copy from blackboard; elliptical work; independent work.

11. Guide words in story; guide phrases, or those which are significant in the story. Copy from blackboard, write independently.

12. Lists of unusual expressions, phrases, words to be used in sentences.

II. Thought-Content

1. Writing paragraph liked best. Illustrate.

2. Illustrating best point in lesson. Copy from book exact words; write independently the best point in the lesson.

3. Copying conversation in lesson. Quotation marks.

4. Copying descriptive parts. Writing description in own words; as of a character; a scene; an act.

5. Copying interrogative, exclamatory, sentences. Change form to declarative.

6. Questions on board answered from text in exact words; in child's own words.

7. Questions on paragraph made by children. (Best put on board for class work, or used for query box.)

8. Reproduction of paragraph chosen by teacher or children.

9. Reproduction of the best part of the lesson.

10. Outline a lesson with its significant parts; copy from blackboard; make outline independently.

11. Outline a lesson; write another story something like it.

12. Complete a story, or change its ending.

13. Change a reading lesson from a narrative to a dialogue or drama.

14. Copy a poem, or part of a poem; illustrate parts.

15. Occasionally give such problems as: Why did you like this story? Compare the characters in two stories; give good points of each, differences. Compare two stories, noting differences, likenesses in scenes or setting, in plot, in characters.

At the end of the Fourth Year the children should have attained a standard in reading measurable in terms of reading pace, retention of thought-content, voice, quality, and poise. The definite gains to be made in this grade stated in the introduction should be used to determine a pupil's fitness for advancement.

The completion of the Fourth Reader, four supplementary texts, including two books from the Voluntary or Pleasure Reading List, is the minimum requirement.

CIRCULATING LIBRARY FOR FIRST, SECOND, THIRD, FOURTH GRADES

Sets of books may be obtained at the office upon request. Books listed in one grade may frequently be read in succeeding grades.

FIRST GRADE

FIRST HALF YEAR: *Aldine Primer*, Bryce; *Heart of Oak Books, I*, Norton; *Outdoor Primer*, Grover; *Reading Literature Primer*, Free and Treadwell; *Sunbonnet Babies Primer*, Grover.

SECOND HALF YEAR: *Aldine First Reader*, Bryce; *Busy Brownies at Work*, Davidson and Bryce; *Busy Brownies at Play*, Davidson and Bryce; *Children's First Story Book*, Wood; *Child Life First Reader*, Blaisdell; *Progressive Road to Reading, Book I; Reading Literature First Reader; Riverside Reader, Book I; Summer's First Reader.*

SECOND GRADE

FIRST HALF YEAR: *Aldine Second Reader*, Bryce; *Child Classics, Book II*, Alexander; *Eugene Field Reader*, Field; *Folklore Stories and Proverbs*, Wiltse; *Rhymes and Stories*, Lansing; *Seaside and Wayside, I, II*, Wright; *So Fat and Mew Mew*, Craik.

SECOND HALF YEAR: *Bow Wow and Mew Mew*, Craik; *Children of the Cliff*, Wiley and Edick; *Indian Primer*, Fox; *Goody Two Shoes*, Welsh; *In Mythland*, Beckwith; *Riverside Second Reader; Summer's Second Reader*; *Seventeen Cats.*

THIRD GRADE

FIRST HALF YEAR: *Animal Life*, Bass; *In Mythland*, Beckwith; *Plant Life*, Bass; *That's Why Stories*, Bryce.

SECOND HALF YEAR: *Gulliver's Travels*, Baldwin; *Legends of Red Children*, Brooks; *Old Greek Stories*, Baldwin; *Pioneer Stories*, Bass; *Pinocchio*, Collodi; *Arlo.*

FOURTH GRADE

FIRST HALF YEAR: *Fairy Tales*, Andersen; *Old Greek Stories*, Baldwin; *Viking Tales*, Hall; *Fifty Famous Stories*, Baldwin; *The Pig Brother*, Richards; *Two Little Knights of Kentucky*, Johnston.

SECOND HALF YEAR: *America's Story for America's Children*, Pratt; *At the Back of the North Wind*, McDonald; *In the Days of Giants*, Brown; *The Child's Book of American History*, Blaisdell and Ball; *Bud and Bamboo; Historical Plays for Children*, Bird and Starling; *Our Little Brazilian Cousin.*

VOLUNTARY OR PLEASURE READING FOR FIRST, SECOND, THIRD AND FOURTH GRADES

In many cities effective co-operation exists between public schools and public libraries. Public libraries should supplement the work of the school, serving children as well as adults in the formation of the library habit, thereby doing effective work in the community. Since there are no avaialble library centers for our children, the establishment of grade libraries in the schools, containing books suited to the varying interests of children according to their years, is the nearest approach to the ideal. Each grade should have a library of from forty to sixty different books, to be used in a period which may be termed "The Library Hour."

Voluntary or Pleasure Reading affords an opportunity to familiarize children with a wider range of reading material than the usual

basic texts and the supplementary readers can supply. A child may read one or several books during the year according to his capacity. Two ends are thus served: (1) more practice in reading is provided, (2) familiarity with a wider field of literature is given.

In first and second grades where reading still deals largely with the mechanics of reading, sets of books for each class group seem better adapted to the children's needs than the individual, different books. In this case the home and school can well co-operate in the purchase of a set for the group and at the end of the year each child may claim a copy for his own library at home. However by the beginning of the second half-year second grade children are interested in the Library Hour. "Playing Library" for one-half hour in second grade is extended to two half hour periods in third and fourth years.

THE PLAN

Each child is permitted to select a book, under the teacher's guidance, to keep for a week, or a month, record being made upon a Pleasure Reading Record Card as follows:

VOLUNTARY OR PLEASURE READING

GRADE,————SCHOOL, TERM BEGINNING————1915

The Class	*The Books*		
Adams, Grace. .	Children of the Palm Lands 2/8	Ten Boys 3/9	Sinbad 4/15
Brown, Frank...	First Book in American History 2/15		

Enter in appropriate space date when each book is taken. Draw a colored line through date when a book is returned in good condition. Post the record on the bulletin board. During the Library Hour each child reads his own chosen book, the teacher giving assistance with difficulties whenever needed. It is, therefore, a silent reading period in which a teacher gives individual assistance, or works with a small group. Often a child reads to the teacher, frequently reproduces parts of the story. Occasionally a part of a story is told or read to the class as a test in thought-getting and thought-giving and serves as a stimulus to others in creating a desire to read the same interesting material. The incentive to listen is strengthened because new material is presented. The habit of careful reading is instilled and since each pupil feels responsible for the presentation of material which is his personal possession, an increased improvement of vocabulary and manner of telling is noted.

Voluntary or Pleasure Reading used intelligently and persistently, aids in the formation of good library habits, and inculcates a taste for good reading. Each grade above the second should add new books to the grade library each year, and the co-operation of the home and school should be sought by which an interchange of books from the home library and the school library may be effected. Each child should purchase at least one book a year for use at school; at the end of the year the book becomes the child's personal property. The lists following for each of the grades are suggestive and cover the field of children's interests; stories of human life, especially child-life which provide opportunity for discussion of characters and

incidents thereby setting some standards and ideals of right conduct; stories of the preternatural, as found in Old Folks Tales, Modern Fairy Tales, and Classic Myths; stories of out-door life, touching upon nature and animal life; and some poetry. An attempt is made to keep a sense of proportion or balance in all fields of human endeavor.

FIRST GRADE

Alexander, G., *Child Classics*, Book One, Bobbs, Merrill & Co.; Blaisdell, Etta F., *Boy Blue and His Friends*, Little Brown & Co.; Bannerman, Edith, *Little Black Sambo*, F. A. Stokes Co.; Braden, Jenness M., *A Little Book of Well-Known Toys*, Rand, McNally Co.; Craik, D. M., *Bow-Wow and Mew-Mew*, A. Flanagan Co.; Bryce, Katherine T., *Child-Lore Dramatic Reader*, Newson & Co.; Davidson and Bryce, *Busy Brownies at Work, Busy Brownies at Play*, Newson & Co.; Elson-Runkel, *Elson-Runkel Primer*, Scott, Foresman & Co.; Free and Treadwell, *Reading Literature Primer and First Reader*, Row, Peterson & Co.; Gardner, Elizabeth, *Work That is Play*, A. Flanagan Co.; Grover, Eulalie O., *Art Literature Primer, First Reader, Overall Boys, Folk-Lore Reader, I.*, Atkinson, Mentzer & Grover Co.; Harris and Waldo, *First Journeys in Numberland*, Scott, Foresman & Co.; Lang, Andrew, *Little Red Riding Hood and Other Stories*, Ginn & Co.; Michens and Robinson, *Mother Goose Reader*, Silver, Burdette & Co.; Potter, Beatrix, *Peter Rabbit, Squirrel Nutkin*, F. Warne & Co.; O'Shea, M. V., *Six Nursery Classics*, D. C. Heath & Co.; Seigmiller, Wilhemina, *Little Rhymes for Little Readers*, Rand, McNally Co.; Sanford, F. P., *Pussy Tippy Toes Family*, E. P. Dutton Co.; Stevenson, Augusta, *Wide Awake Primer and First Reader, Children's Classics in Dramatic Form*, Book I, Little, Brown & Co.; Welsh, Charles, *Book of Nursery Rhymes*, D. C. Heath & Co.; Wood, May H, *The Children's First Story Book*, American Book Co.; White, Mary D., *When Molly Was Six*, Houghton, Mifflin Co.; Wiggin and Smith, *Pinafore Palace*, Doubleday, Page & Co.

SECOND GRADE

Aesop, *Classic Fables*, Ginn & Co.; Bass, Florence, *Animal Life, Plant Life, In Mythland*, D.C. Heath Co.; Beckwith, M. F., *In Mythland*, D.C. Heath Co.; Bigham, Madge, *Merry Animal Tales, Mother Goose Village*, Rand, McNally & Co.; Blaisdell, Etta F., *Boy Blue and His Friends, Twilight Town, Cherry Tree Children*, Little, Brown & Co.; Blake and Alexander, *Graded Poetry Readers, I—II*, Chas. E. Merrill Co.; Burnett, F. H., *Queen Silver Bell*, Century; Bryce, Katherine T., *Child-Lore Dramatic Reader*, Newson & Co.; Fox, F. C., *Indian Primer*, American Book Co.; Free and Treadwell, *Reading Literature Second Reader*, Row, Peterson & Co.; Gates, J. S., *Nannette and Baby Monkey*, Houghton, Mifflin Co.; Grover, O., *Art-Literature Second Reader*, Atkinson, Mentzer Co.; Hale, L. P., *Peterkin Papers*, H. Mifflin & Co.; Hervey and Hix, *Once Upon a Time Stories, Horace Mann Second Readers*, Longmans, Green & Co.; Holbrook, Florence, *Hiawatha—dramatized*, Houghton, Mifflin & Co.; Howard, *Banbury Cross Stories*, Chas. E. Merrill Co.; Johonnot, J., *Book of Cats and Dogs*, American Book Co.; Lucia, Rose, *Peter and Polly in Summer, Peter and Polly in Winter*, American Book Co.; O'Shea, M. V., *Eyes and No Eyes, Old World Wonder Stories*, D. C. Heath; Perkins, L. F., *The Dutch Twins*, Houghton, Mifflin & Co.; Pratt, Mara L., *Legends of Red Children*, American Book Co.; Skinner and Lawrence, *Little Dramas for Primary Grades*, American Book Co.; Shaw, Edwin K, *Little Folks of Other Lands*, American Book Co.; Stevenson, Augusta, *Children's Classics in Dramatic Form, Books I, II*, Houghton, Mifflin Co.; Ste-

venson, R. J., *Child's Garden of Verse*, D. C. Heath and Co.; Varney, Alice Summer, *Story Plays, Old and New, I, II, III*, American Book Co.; Wiley, Edick, *Children of the Cliff*, D. Appleton & Co.; Wiltse, S. E., *Folk-Lore Stories*, Ginn & Co.; Welsh, Charles, *Goody Two Shoes, Mother Goose Rhymes*, D. C. Heath.

THIRD GRADE

Allen, A. E., *Children of the Palm Lands*, American Book Co.; Andrews, Jane, *Seven Little Sisters*, Ginn & Co.; Abbot, F., *Boy on a Farm*, American Book Co.; Bass, Florence, *Pioneer Life*, D. C. Heath & Co.; Babbit, H. C., *The Jataka Tales of India*, Century Co.; Batchelder, C. B., *The Wings of Mignonette*, (Dramat.), Walter H. Baker Co., Boston.; Baldwin, James, *Gulliver's Travels, Old Stories of the East*, American Book Co.; Baum, Frank L., *The Wizard of Oz*, Ginn & Co.; Blaisdell, E. F., *Child Life in Many Lands*, Little, Brown & Co.; Bradish, Sarah P., *Stories of Country Life*, American Book Co.; Brevard, Caroline M., *Around the Lightwood Fire*, B. F. Johnson Co.; Brown, Abbie F., *The Lonesomest Doll*, Houghton, Mifflin Co.; Bryce, Katherine T., *That's Why Stories*, Newson & Co.; Burgess, Thornton W., *Mother West Wind's Children*, Little, Brown & Co.; Carroll, C. F. & S. W., *Around the World, I, II, III*, Silver, Burdett Co.; Chance, Lulu M., *Little Folks of Other Lands*, Ginn & Co.; Coe and Christie, *Story Hour Reader, III*, American Book Co.; Cook, Flora J., *Nature Myths*, A. Flanagan Co.; Collodi, C., *Adventures of Pinocchio*, Ginn & Co.; Crothers, Samuel, *Miss Muffet's Christmas Party*, Houghton, Mifflin Co.; Craik, Dinah M., *Little Lame Prince, Adventures of a Brownie*, D. C. Heath & Co.; De Sigur, E., *Sophie, Story of a Donkey*, D. C. Heath & Co.; Eggleston, Edward, *Stories of Great Americans for Little Americans*, American Book Co.; Goodlander, Mabel, *A Book of Fairy Plays for Children*, American Book Co.; Hallock, Ella V., *In Those Days*, Macmillan Co.; Hix, Melvin, *The Magic Speech Flower*, Longmans, Green & Co.; Holbrook, Florence, *Nature Myths*, Houghton, Mifflin & Co.; Husted, M. H., *Stories of Indian Children*, Public School Pub. Co.; Jackson, H. H., *Letters from a Cat*, D. Appleton Co.; Judd, Catherine, *Classic Myths*, Rand, McNally Co.; Kipling, Rudyard, *Just So Stories*, Houghton, Mifflin Co.; Lang, Andrew, *Fairy Tales*, Burt Publishing Co.; Kirby, Mary E., *Aunt Martha's Corner Cupboard*, D. C. Heath & Co.; Miller, Margaret, *My Saturday Bird Class*, Ginn & Co.; Miller, O. T., *First Book of Birds, Second Book of Birds*, Houghton. Mifflin & Co.; McIntyre, Margaret, *The Cave Boy*, D. Appleton & Co.; Patterson, A. J., *The Spinner Family*, McClurg & Co.; Perkins, Lucy-Fitch, *The Dutch Twins, The Japanese Twins*, Houghton, Mifflin Co.; Pyrnette, Mrs. L. C., *Diddie, Dumps and Tot*, Harper Bros.; Pratt, Mara L., *Stories of Colonial Children, Legends of Red Children, America's Story for America's Children, I*, D. C. Heath Co.; Pumphrey, Margaret, *Pilgrim Stories*, Rand, McNally Co.; Rands, William Bright, *Lilliput Lyrics*, Rand, McNally Co.; Richmond, Maria, *Second Reader*, Ginn & Co.; Scudder, Horace E., *Book of Legends, Grimm's Fairy Tales*, Houghton, Mifflin Co.; Snedden, Geneva Sissons, *Docas, the Indian Boy*, D. C. Heath Co.; Shaw, E. C., *Big People and Little People of Other Lands*, American Book Co.; Schwartz, Amelia, *Five Little Strangers*, American Book Co; Saunders Margaret, *Beautiful Joe*, Scribner's; Stevenson, Augusta, *Children's Classics in Dramatic Form, Book III*, Houghton, Mifflin Co.; Stevenson R. L., *Child's Garden of Verse*, Rand, McNally and Co.; Turpin, Edna Lee, *A Child's Book of Poetry*, Chas. E. Merrill Co.; Welsh, Lucie D., *Colonial Days*, Educational Publishing Co.; Wiley, *Mewanee*, Silver Burdett Co.; Wiggin and Smith, *Story Hour, Story of Patsy*, Houghton, Mifflin Co.; Wiltse, Sara E., *Kindergarten Stories and Morning Talks*, Ginn & Co.

FOURTH GRADE

Andersen, Hans, *Fairy Tales, Danish Fairy Tales,* Macmillan Co.; Andrews, Jane, *Seven Little Sisters, Each and All,* D. C. Heath & Co.; Atherton, Edward, *Adventures of Marco Polo,* D. Appleton & Co.; Baldwin, James, *The Wonder Book of Horses, Old Greek Stories, Fifty Famous Stories, Four Great Americans, Don Quixote for Young People,* American Book Co.; Bender, Milicent, *Great Opera Stories,* Houghton, Mifflin Co.; Bird and Starling, *Historical Plays for Children,* Macmillan Co.; Blaisdell and Ball, *First Book in American History, Child's Book of American History,* Ginn & Co.; Bord, H., *When I Was a Boy in China,* Putnam; Brentano, Kleiens, *Gackel, Hinkel, Gackelsia,* Silver, Burdett & Co.; Brown, Abbie Farwell, *In the Days of Giants,* Rand, McNally Co.; Bryant, S. C., *How to Tell Stories, Stories to Tell Children,* Houghton, Mifflin Co.; Burnett, Frances H., *Editha's Burglar, Little Lord Fauntleroy, Sara Crewe, Little Saint Elizabeth,* Scribner's; Burt, Mary E., *Poems Every Child Should Know,* Doubleday, Page & Co.; Bryson, K., *Child Life in a Chinese Home,* American Book Co.; Carroll, Lewis, *Alice in Wonderland,* (Dramat.), Dramatic Pub. Co., Chicago; Cervantes, *Don Quixote,* Macmillan Co.; Chamberlain, James F., *How We Are Fed, How We Are Clothed, How We Are Sheltered, How We Travel,* Macmillan Co.; Colson and Clittendon, *Letters to Children by Famous People;* Cook, A. S., *Story of Ulysses,* Pub. Sch. Pub. Co.; Dickens, Charles, *Christmas Stories,* Crowell & Co.; Dodge, Mary Mapes, *Hans Brinker or the Silver Skates,* E. P. Dutton; Duncan, *Adventures of Billy Topsail,* Revell Co.; Dutton, Samuel, *World at Work, Trading and Exploring,* American Book Co.; Earle, Alice Morse, *Home Life in Colonial Days,* Grossett & Dunlap; Ewing, Julia Horatio, *Jackanapes,* D. C. Heath & Co.; Field, Eugene, *Book of Christmas and Other Stories,* Scribner; Free and Treadwell, *Reading, Literature Book, IV,* Row, Peterson & Co.; Frost, A. B., *Wagner Story Book,* Scribner; Frye, Alexander, *Brooks and Brook Basins,* Ginn & Co.; George, Marion, *The Little Journey Series,* H. Flanagan Co.; Gulick, L. H., *Good Health, Emergencies,* Ginn & Co.; Hales, E. E., *Peterkin Papers,* Houghton, Mifflin Co.; Hales, S., *The Story of Mexico,* Putnam; Hall, Jennie, *Viking Tales, Weavers and Other Workers, Four Old Greeks,* Rand, McNally & Co.; Harris, Joel Chandler, *Little Mr. Thimblefinger, Mr. Rabbit at Home, Uncle Remus Stories,* D. Appleton & Co.; Hazard and Dutton, *Indians and Pioneers,* Silver, Burdett Co.; Hodgson, Jeannette, *First Course in American History, Books I and II,* D. C. Heath & Co.; Holbrook, Florence, *Nature Myths, Northland Heroes,* Houghton, Mifflin Co.; Howells, W. D., *Christmas Every Day in the Year,* Scribner; Jackson, H. H., *Letters from a Cat,* D. Appleton Co.; Johonnot, J., *Stories of Heroic Deeds,* American Book Co.; Johnston, Annie Fellows, *Two Little Knights of Kentucky, Giant Scissors,* Doubleday, Page Co.; Judd, Katherine, *Classic Myths,* King; *Geography Readers,* Lee, Shepard & Co.; Kingsley, Charles, *Water Babies,* D. C. Heath & Co.; Kipling, Rudyard, *Just So Stories, Jungle Books, I and II,* Houghton, Mifflin Co.; Lang, Andrew, *Fairy Tales, Green Fairy Book,* Longmans, Green Co.; Lang, Jeannie, *Stories from the Iliad, Stories from the Odyssey,* E. P. Dutton & Co.; Litsey, Edwin C., *The Race of the Swift;* Lucia, Rose, *Stories of American Discoverers for Little Americans,* American Book Co.; McDonald and Dalrymple, *Little People Everywhere,* 12 Vols., Little, Brown & Co.; Mabie, Hamilton Wright, *Fairy Stories Every Child Should Know,* Doubleday, Page Co.; *Norse Stories,* Silver Burdett & Co.; Menefee, Maude, *Child Stories from the Masters,* Lakeside Press, Chicago; Morley, Margaret, *Donkey John of Toy Valley,* McClurg; McDonald, George, *The Princess and the Goblin, The Princess and the Curdie,* Lippincott; *At the Back of the North Wind,* David McKay Co.; Otis, Henry, *Calvert of Maryland,*

American Book Co.; Phelps-Ward, Elizabeth Stuart, *Loveliness (a dog story);* Pratt, Mara L., *America's Story for American Children, Books I, II, III,* D. C. Heath & Co.; *Stories of Australia,* Educa. Pub. Co.; Pumphreys, Margaret, *Pilgrim Stories,* Rand, McNally & Co.; Pyle, Katherine, *The Christmas Angel,* Little, Brown & Co.; *Stories of Humble Friends,* American Book Co.; Pyle, Howard, *The Wonder Clock,* Harper Bros.; Radford, Maude L., *King Arthur and His Knights,* Rand, McNally Co.; Richards, L. E., *Captain January,* Dana Estes & Co.; Ruskin, John, *King of the Golden River,* Crowell Co.; Seton-Thompson, Ernest, *Wild Animals I Have Known, The Trail of a Sand Hill Stag, Wahb,* Scribner's; Sewall, Anna M., *Black Beauty,* Educational Pub. Co.; Sidney, Margaret, *Five Little Peppers and How They Grew,* Lothrop, Lee, Shepard; Stanley, *My Kalulu, Central Africa,* Scribner; Stockton, Frank R., *In the Queen's Museum, The Christmas Truants, Fanciful Tales,* Scribner; Stone and Fickett, *Everyday Life in the Colonies,* D. C. Heath & Co.; Van Dyke, Henry, *The First Christmas—in "The Blue Flower,"* Scribner; Vincent, T., *Around and About South Africa,* D. Appleton & Co.

HOME READING LISTS: PRIMARY GRADES

The school cannot provide all the books with which children should become familiar. Nor should the school library exclude the necessity for the home library; one should supplement the other.

Many of the books listed as voluntary, or pleasure-reading material could with equal right be placed in this list and vice versa; but the intention is to provide a suggestive list for both teachers and parents from which rational choice may be made. Co-operation of school and home should result in a wider use of books by a system of exchange. Teachers are expected to use tact in reading from these books or having them read at home; the object is to create a taste for and to arouse the habit of reading good literature, and then to direct in a measure the reading children should do.

This list is meant to be representative, not exhaustive. The volumes can be obtained from any reliable bookseller.

First and Second Grades

Alcott, *The Candy Country,* Little, Brown & Co.; Bailey and Lewis, *For the Children's Hour,* Milton, Bradley Co.; Burnett, *Queen Silver Bell,* Century Co.; Davidson and Bryce, *Busy Brownies at Work, Busy Brownies at Play,* Newson Co.; Gates, *Nannette and Baby Monkey,* Houghton, Mifflin Co.; Hix, *Once Upon a Time Stories,* Longmans, Green & Co.; Howard, *Banbury Cross Stories,* Chas. E. Merrill; Jackson, *Cat Stories,* D. Appleton Co.; Johnson, *Book of Plays for Little Actors,* American Book Co.; Jordan, *Story of the Knight and Barbara,* Appleton Co.; Lear, *Nonsense Verses,* F. Warne and Co.; Lucia, *Peter & Polly in Summer; in Winter,* American Book Co.; Montgomery, *Chickens and Chicks,* Barse & Hopkins; Mulock, *Hop O' My Thumb,* Caldwell Co.; Ouida, *Dog of Flanders,* Educational Pub. Co.; Potter, B., *The Tale of Squirrel Nutkin,* F. Warne Co.; Poulsson, *Finger Plays,* Little, Brown & Co.; Richards, *The Golden Windows,* Little, Brown & Co.; Rossetti, C., *Singsong, A Nursery Rhyme Book,* Macmillan Co.; Stevenson, R. L., *Child's Garden of Verse,* Rand, McNally & Co.; Stevenson, *Children's Classics in Dramatic Form,* Houghton, Mifflin Co.; Skinner and Lawrence, *Dramatic Reader,* American Book Co.; White, *When Molly Was Six,* Houghton, Mifflin Co.

Third Grade

Andersen, Hans, *Fairy Tales*, Ginn & Co.; Arabian Nights, *Sinbad the Sailor*, Macmillan Co.; Baldwin, James, *Old Greek Stories, Fifty Famous Stories, More Fifty, Famous Stories*, American Book Co.; Baum, Frank L., *The Wizard of Oz*, Ginn & Co.; Brine, Mary D., *Little Lad Jamie*, Dutton & Co.; Brown, Abbey F., *Book of Friendly Saints and Beasts, The Lonesomest Doll*, Houghton, Mifflin Co.; Burnett, Frances H., *Rackety Packety House*, Century Co.; Lang, Andrew, *Fairy Books*, Longmans, Green Co.; Lear, Edward, *Nonsense Verses*, F. Warne & Co.; Pyrnette, Mrs. L. C., *Diddie, Dumps and Tot*, Harper Bros.; Scudder, Horace E, *Grimm's Household Tales*, Houghton, Mifflin Co.; Wyss, Edward, *Swiss Family Robinson*, Ginn & Co.; Wiggin and Smith, *The Bird's Christmas Carol*, Little, Brown Co.; *The Posy Ring*, Doubleday, Page & Co.

Fourth Grade

Burnett, Frances Hodgson, *Little Lord Fauntleroy, Sara Crewe*, Scribner; Gibbs, John, *Beowulf, in Children's Hour, Vol. IV.*, Houghton, Mifflin Co.; Hale, E. E., *Arabian Nights*, Ginn & Co.; Hancock, Mary, *Children of History, Early Times, Later Times*, Little, Brown & Co.; Harris, Joel Chandler, *Little Mr. Thimblefinger*, Houghton, Mifflin Co.; *Uncle Remus Stories*, Appleton Co.; Holbrook, Florence, *Northland Heroes*, Houghton, Mifflin Co.; Jenks, Tudor, *Galop Off*, Altemus; Johnston, Annie Fellows, *Two Little Knights of Kentucky, Giant Scissors*, Doubleday, Page Co.; Kipling, Rudyard, *Jungle Books, I and II, Just So Stories*, Century Co.; Laboulaye, Edouard, *Fairy Tales of All Nations*, Harper Bros.; Mabie, H. Wright, *Heroes Every Child Should Know*, Doubleday, Page Co.; Molesworth, *Mrs. Carrots*, Macmillan Co.; Pyle, Howard, *Pepper and Salt, The Wonder Clock*, Harper Bros.; Richards, Laura E., *The Pig Brother and Other Stories*, Little, Brown & Co.; Shute and Dunton, *The Land of Song, Nos. I, II, and III*, Silver Burdett Co.; Steen, Avalon, *Gabriel and the Hour Book*, Doubleday, Page & Co.; Sydney, Margaret, *Five Little Peppers and How They Grew*, Lothrop, Lee & Shepard; Thompson, Ernest, *Lobo, Rag, and Vixen, Wild Animals I Have Known*, Scribner; Turpin, Edna Lee, *Stories from American History*, C. E. Merrill; Wiggin & Smith, *The Fairy Ring, The Posy Ring*, Doubleday, Page Co.

LITERATURE: PRIMARY GRADES*

Introduction.—By common consent literature occupies a prominent place in the school curriculum since it not only has intellectual value but ethical and esthetic value as well. The work in literature aims to help the child to understand and interpret life about him and to create ideals which will help him to right living. It also carries him into the realm of the beautiful, opening to him an unlimited field of pleasure and enjoyment.

In the primary grades where children can do little reading for themselves the work in literary appreciation is accomplished principally by means of stories told by the teacher. As the child's ability to read grows, these told stories gradually diminish in number, but this type of work in oral presentation is found valuable even in advanced grades. It is the purpose to have a story told and dramatized in one grade and read in the next. How varied the stories are in scope and character may be gathered from the outlines that follow. These lists are suggestive rather than fixed. Each teacher choosing from the extended list varies her stories from year to year being guided by the particular needs of her class or by some specific purpose she has in mind.

Some stories are to be told or read to children for the simple enjoyment which they bring, others are reproduced, the shorter, simpler ones being used for this purpose. These are found most effective models, the child reproducing unconsciously the vocabulary, the expression, even the enunciation he has heard. The teacher guides by means of questions and by simple outline in the reproduction of parts, lastly the whole unit thereby aiding the children to gain the vivid mental picture conveyed by the words. As much correction of errors in English as can take place without serious interruption of the child's thought is given.

Some poems as well as stories are presented to give pure delight, some for purpose of dramatization, some for purpose of recall. In teaching a memory selection the play of motive is important. Arouse the desire by the skillful use of the instincts of social co-operation,

*Considerable material and many of the ideas in this section have been drawn from *The Elementary Course in English* by Professor James Fleming Hosic, Head of the Department of English, Chicago Normal College. Unless otherwise indicated, all quoted material in the outline for Grades I to IV has been taken from Professor Hosic's *Course*.

emulation, pride, imitation. Memorize the poem by experiencing the thought in coherent units and parts of a larger whole with sufficient repetition in play or dramatization, in song, in recitation, calling upon children singly and in groups to fix the rythmic form.

No teacher is expected to present all the poems listed for each month. This list is sufficiently large and suggestive to admit of freedom of choice. Some poems are to be read or recited *to* the class, some are to be memorized *by* the class. Certain favorite selections are memorized in each grade. The list, too, varies with the class, with individual preferences and with the teacher's purpose. Each grade, however, holds itself responsible for committing to memory a number of the finest selections on its list; this includes poems recited, stories told and dramatized. These are reviewed from year to year and new ones are added that the children may have gradually stored away in their minds some of the treasures that are their English birthright.

Dramatic work is closely related to the work in story-telling and reading. It is a test of interpretation and tends to deepen content as well as to strengthen control of powers of expression. Four types of dramatic work are developed in practice: (1) Spontaneous work which is done without much planning with the children upon the completion of a story. It simply is an expression in action of what the children have gained; (2) Deliberate planning directed by the teacher with reference to acts, scenes and characters. Several lessons might be given to the work, depending upon the purpose and amount of material; (3) This oral planning recorded in a permanent form in the language period. This finished result should have some definite purpose in view as an audience to witness and enjoy the result. It gives excellent opportunity for choosing language suited to the purpose and in organizing the work to a given end, determined by a stimulating motive; (4) Occasionally the dramatic work should be costumed, staged, and trained for a public performance, if the spectacular element is subordinated to worthy ends.

Opportunities for motivated work are found in the use of literature at the morning exercise, at the rest periods, in illustration of some specific point in the lesson, and for special occasions at school and at home.

Illustrative material consisting of pictures, objects, and graphic illustrations is essential in all grades.

REFERENCES: Chubb, *The Teaching of English,* Macmillan; Cox, *Literature in the Common Schools,* Little, Brown Co.; Hayward, *Lessons in Appreciation;* Strayer, *A Brief Course in the Teaching Process* (*The Appreciation Lesson*), Macmillan; Keyes, *Stories and How to Tell Them,* Appleton; Bryant, *How to Tell*

Stories to Children; Palmer, *Self-Cultivation in English;* Adler, *Moral Instruction to Children;* MacClintock, *Literature in the Elementary School,* University of Chicago Press.

FIRST GRADE

The story and the poem have a large place in elementary education. Each is a powerful instrument in the hands of an artistic teacher. G. Stanley Hall says, "Of all the things that a teacher should know how to do, the most important, without any exception, is to be able to tell a story." It is indeed, the rainbow bridge by which we climb from earth to heaven.

"The story is the natural means for instructing little children. It is the primitive and popular way of thinking; it awakens the imagination and may train it; it cultivates the taste for literature. It affords the opportunity for language training by giving something to talk about, increasing skill in pronunciation; it develops the power to hold to a train of thought and strengthens the memory."

Nursery rhymes, finger plays, simple poems, and cumulative stories characterize the material for this grade. The stories are of three types: The Old Folk Tale, as The Three Bears, Cinderella; the Modern Fairy Tale, as The Pig Brother; and the Fable, as The Lion and the Mouse. Some stories and poems are given for pleasure; some for their ethical value; some for definite language training. The teacher's voice and manner of telling should serve as an unconscious model. Occasionally a poem may be placed on the board for incidental reading. The children should be given a single complete impression of the whole usually accompanied with graphic illustration to deepen the impression. There should be no attempt to have the story retold until it has been heard more than once and has been grasped sufficiently for them to ask questions. A long story should then be told in parts by the teacher, retaining the spirit without violating the structure. Questions should carefully guide the conversation toward the telling of the story in parts and as a whole. The more dramatic rhymes and stories should be acted, largely at the suggestion of the children themselves. Only the shorter stories should be told by the children. The work with a poem should generally include memorizing and reciting by the pupils, individually and sometimes in concert. Aim for genuine expression.

An average of one story a month for reproduction and dramatization, of one poem a month for memorizing, is the maximum requirement, though many classes will accomplish much more. The minimum requirement will be six stories and six poems for the year. By the end of the year each pupil should be able to tell two stories from

beginning to end, and recite three poems, in a manner pleasing to the class. "The value of the story or poem can be measured by the interest of the children and their desire to make it their own." With this in mind each child should be permitted to tell his favorite story and poem.

Time Allotment: Three 15 minute periods per week.

STORIES

September

Old Woman and Her Pig:
- Nursery Classics. O'Shea, p. 20.
- How to Tell Stories. Bryant, p. 43.
- Jingle Primer, p. 19.
- Second Reader. Lippincott, p. 115.

The Three Bears:
- How to Tell Stories. Bryant, p. 37.
- Folk-lore Stories and Proverbs. Wiltse, p. 43.
- Kindergarten Stories and Morning Talks, Wiltse, p. 85.

The Little Red Hen:
- Stories to Tell to Children. Bryant, p. 7.
- Rhymes and Stories. Lansing, p. 82.

Chicken Little:
- Stepping Stones to Literature, Book II, p. 11.
- Rhymes & Stories. Lansing, p. 100.

October

The Pancake:
- Reading Literature Primer, p. 51.
- Rhymes and Stories. Lansing, p. 128.

The Three Pigs. S. C. Bryant, How to Tell Stories, p. 32.

Hans and the Brownie.
- Progressive Road to Reading, Book I, p. 90.

Little Black Sambo: Bannerman.

November

The Big Red Apple. Patch:
- For the Children's Hour, p. 58.

How Patty Gave Thanks:
- Child's World. Poulsson, p. 94.

The Gingerbread Boy:
- Stories to Tell Children. Bryant, p. 8.

The Pig Brother. L. E. Richards:
- How to Tell Stories, p. 141.

December

Willie Winkle:
- Kindergarten Stories and Morning Talks. Wiltse, p. 110.

Christmas in the Barn:
- Child's World. Poulsson, p. 119.

The Christmas Stocking. More Mother Stories. Maud Lindsay.

January

The Cookie Boy. L. E. Richards.
- How to Tell Stories. Bryant, p. 144.

The Lion and the Mouse.
- Stepping Stones to Literature, II, p. 121.
- Richmond Second Reader, p. 78.
- Art Literature Reader, II, p. 69.
- Kindergarten Stories and Morning Talks. Wiltse, p. 43.

Spot's Kittens:
- In the Child's World, p. 146.

February

Red Riding Hood:
- Progressive Road to Reading, II, p. 33.

How Cedric Became a Knight:
- In Storyland. Harrison, p. 143.
- Stepping Stones, IV, p. 55.

The Ant and the Dove:
- Jones' Second Reader, p. 43.

March

The Wind's Work:
- Mother Stories. Lindsay, p. 1.

The North Wind at Play:
- Child's World. Poulsson, p. 71.

Peter Rabbit: Beatrix Potter.

Little Half Chick:
- Stories to Tell to Children, p. 33.

April

The Easter Rabbit. Annie Schutze:
- Elson Second Reader, p. 139.

Lesson on Faith:
- Child's World. Poulsson, p. 307.
- Nature Reader, I, p. 205.
- In Storyland. Harrison, p. 96.

The Story of Speckle:
- Child's World, p. 337.

How the Robin Got its Red Breast:
- Nature Myths. Cooke, p. 24.

May

The Crow and the Pitcher:
- Stepping Stones, II, p. 143.

The Goats in the Turnip Field:
- Jones' Second Reader, p. 63.

The Oriole's Nest:
- Story Hour. Wiggin and Smith, p. 29.

Cinderella:
- Fairy Stories and Fables. Scudder, p. 58.

June

How the Elephant Got His Trunk, or The Elephant Child:
Just-So Stories. Kipling, p. 63.
The Wind and the Sun:
Stepping Stones, II, p. 85.
Child's World, p. 396.
Morning Talks. Wiltse, p. 156.
How to Tell Stories. Bryant, p. 71.
Why We Have Pink Roses:
How to Tell Stories. S. C. Bryant, p. 129.

REPRODUCTION AND DRAMATIZATION

Good Nursery Rhymes:
Jack and Jill.
Jack, Be Nimble.
Robin and the Pussy Cat.
Little Miss Muffet.
Little Bo-Peep.
Little Jack Horner.
Sing a Song of Sixpence.

STORIES

1. The Little Red Hen.
2. Chicken Little.
3. The Gingerbread Boy.
4. The Lion and the Mouse.
5. Little Red Riding Hood.
6. The North Wind at Play.
7. Little Half-Chick.
8. The Three Bears.
9. The Wind and the Sun.
10. Cinderella.
11. Goats in the Rye Field.
12. The Pan-Cake.

In addition to the reproduction and dramatization of six Nursery Rhymes, all First Year classes will be held responsible for six stories as a minimum requirement. Numbers 1 or 2, 3 or 4, 5 or 6, of the above list are required; the teacher may choose two others from the same list, and the rest from previous lists. An *average of one story a month* for reproduction and dramatization is the maximum requirement. At the end of the year *each* child should be able to tell two stories.

POEMS

September

Nursery Rhymes:
Jack and Jill.
Mistress Mary.
Jack, Be Nimble.
Simple Simon.
This Little Pig.
Jack Horner.
Pussy Cat.
Hey, Diddle, Diddle.
Little Boy Blue.
Welsh. Rhymes and Stories:
Lansing Jingle Primer.
Finger Plays:
The Family. Emilie Poulsson.
a. Mix a Pan Cake. Reading Literature I, p. 52.
b. What is Pink? Reading Literature II, p. 68.
Which Loved Best. Allison.
Elson Reader III, p. 93.

October

Bed in Summer:
Stevenson. Child's Garden of Verse, p. 16.
Art Literature Reader II, p. 13.
My Shadow: (Memorize one stanza)
Stevenson. Child's Garden of Verse, p. 44.
Art Literature Reader II, p. 14.
Poems Every Child Should Know, p. 9.
The Baby:
McDonald. Stepping Stones I, p. 125.
Come, Little Leaves:
Art Literature Reader II, p. 68.
Gaynor Song Book.
Aldine First Reader, p. 29.

November

Leaves at Play:
F. D. Sherman. Little Folks Lyrics, p. 81. Nature Reader II, Wilson, p. 80.
Finger Plays: The Squirrels, p. 45.
The Miller. Poulsson, p. 65.
Thanksgiving Prayer:
Child's World. Poulsson, p. 97

December

Twinkle, Twinkle, Little Star:
Jane Taylor. Art Literature Primer, p. 105.
Poems Every Child Should Know, p. 6.
Why Do Bells for Christmas Ring?—
Eugene Field.
Art Literature Reader III, p. 24.
Kris Kringle. T. B. Aldrich.
A Humming Top:
Eugene Field Reader, p. 32.

January

Snow Flakes:
Lucy Larcom. Nature Reader I. Wilson, p. 97.
Lady Moon:
Lord Houghton. Stepping Stones, II, p. 84.
Sleep, Baby Sleep:
From the German. Nature Readers II, Wilson, p. 98.
Art Literature Readers I, p. 88.

February

Marching Song:
Stevenson. Child's Garden of Verse, p. 50.
The Cow:
Stevenson. Child's Garden of Verse, p. 52.
Art Literature Reader II, p. 18.
Making Butter:
Finger Play. E. Poulsson, p. 73.
America (first stanza):
Stepping Stones II, p. 90.

March

The Wind:
Stevenson. Child's Garden of Verse, p. 56.
Aldine Reader, II, p. 63.
Who Has Seen the Wind? Rossetti.
Sun and Rain. Rossetti.
Blow, Wind, Blow. Nursery Rhymes: Welsh, p. 97.
A Tiny Seed:
Kate L. Brown. Stepping Stones, III, p. 62.
Little White Lily:
McDonald. Nature Reader, I, p. 209.
Who Likes the Rain? Bates:
Poems Every Child Should Know, Vol. I, p. 10.
Children's First Book of Poetry. Baker, p. 56.

April

The Dandelion. Poulsson. Child's World, p. 69.
What Does Little Birdie Say? Tennyson. Stepping Stones I, p. 127.
Art Literature Reader, Bk. I, p. 74.
Over in the Meadow:
Olive Wadsworth. Story Hour Reader, I, p. 61.
Child Life in Poetry. Whittier.
Nature Study, I, p. 177.
What Brown Pussy Saw. Kate L. Brown. Elson Runkel Primer.
The Chickens. Holton-Curry Second Reader, p. 129.
Apple Blossoms. K. L. Brown.

May

Good Morrow, Pretty Rosebush. Dodge. Stepping Stones I, p. 106.
The Swing. Stevenson. Child's Garden of Verse, p. 70.
Daisies:
Sherman. Nature Reader I, Wilson, p. 92.
Richmond Second Reader, p. 124.
Sherman. Little Folk Lyrics, p. 19.

June

Only One Mother. Stepping Stones I, p. 105.
Boats Sail on the River. Rossetti. Reading Literature II, p. 73.
A Little Boy's Walk. Finger Plays. Poulsson, p. 29.
At the Seaside. Stevenson. Child's Garden of Verse, p. 19.

SELECTIONS FOR MEMORIZING

1. Nursery Rhymes:
   Jack and Jill.
   Mistress Mary.
   Jack Horner.
   Simple Simon.
   Blow, Wind, Blow.
   Pussy Cat.
2. Rossetti's Sing Song:
   Boats Sail on the River.
   Mix a Pan Cake.
   Who Has Seen the Wind?
   Sun and Rain.
3. The Swing.
4. Sleep, Baby, Sleep.
5. Bed in Summer.
6. Marching Song.
7. Over in the Meadow.
8. Come, Little Leaves.
9. A Tiny Seed.
10. Only One Mother.
11. Leaves at Play.
12. A Humming Top.
13. What Does Little Birdie Say?
14. Good Morrow, Pretty Rosebush.

All First Year Classes will be held responsible for six of the above poems, not including Nursery Rhymes. Numbers 2 or 3, 4 or 5, 6 or 7, are required; the teacher may choose three others from the above list, and any additional ones from the previous lists. An *average of one poem a month* for memorizing is the maximum requirement.

At the end of the year *each* child should be able to recite three poems.

SECOND GRADE

The children of the second year will read many of the stories which were told last year, but in addition to literature for reading, oral rendition of stories and poems which meet their widening interests is emphasized. As we come to understand the dominant instincts and interests of children, great care is exercised to preserve a genuine and sincere response to the appeals which prose and poetry make. Simplicity of thought and structure, coupled with sincerity, is found in folk tale and fable, and these, together with simple lyrics of nature, of playtime, of ideals, of fun and fancy, and of love of country, constitute the basis for selection. A teacher is privileged to select material from the preceding grade. A genuine classic gains by repeated study—at suitable intervals and from a different point of view.

Stories previously learned should be retold in this grade. "Favorite stories should be dramatized, with attention to the development of good dialogue." As in the previous grade, the story should be told with graphic illustration, and retold in parts, by the children who are able now to make a simple analysis of a story. Short stories should be used for this incidental training in oral composition. Longer stories . . . "should occasionally be read to the class with no attempt at formal instruction. If the oral reproduction grows out of a clear understanding, the more of the language of the text the children may appropriate the better," . . . but the story should never be memorized. The retelling should vary with each child.

Poems will be memorized as the result of the child's appreciation of the thought and the rhythmic form. Attention will be given to the *unit of thought* as the basis for memorizing and in the oral recitation the aim will be to secure genuine expression.

School activities, the rest periods, the assembly, the morning exercise, special occasions, provide opportunity and furnish incentive for the repetition with interest of poems that have been memorized.

Toward the end of the second year, some of the very short poems may be copied and illustrated.

While the stories and poems are listed month by month for convenience, the order may be changed and selections made at the discretion of the teacher, who will also want to substitute other poems for some on the list. Not all the stories and poems given can be presented each month, but there should be at least one story given for delight, and two short ones, or one long one for specific study with return from the children in reproduction and dramatization.

Folk-Tales, as, The Town Musicians, Snow White and Rose Red;

Modern Fairy Tales, as, The Lombardy Poplar; Fables, as The Fox and the Grapes; and stories dealing with everyday doings of people, and phases of the out-door world, are represented in the second grade list.

Time Allotment: Three 15 minute periods per week.

STORIES

September

Golden Rod and Aster:
Children's Hour, p. 199.
Nature Myths. Cooke, p. 13.
All the Year Round, p. 3.
The Sleeping Apple. Poulsson:
Child's World, p. 7.
The Ant and the Grasshopper. Aesop:
Children's Hour, p. 238.
Woodley I, p. 70.
Stepping Stones, II, p. 37.
The Dog in the Manger. Aesop:
Stepping Stones I p. 93.
Jack and the Beanstalk:
Book of Fables and Folk Stories, Scudder, p. 41.

October

The Fox and the Grapes:
Stepping Stones, II, p. 30.
Hans Who Made Princess Laugh:
Christen Asbjournsen.
Riverside Reader III, p. 105.
The Great Feast. L. E. Richards:
Wide Awake Reader III, p. 26.
Why the Oak Leaves Have Notches:
That's Why Stories. Bryce. p. 145.
The Hare and the Tortoise:
Aesop's Fables, p. 106.
Stepping Stones I, p. 110.

November

The Four Musicians of Bremen:
Child Life in Tale and Fable, p. 137.
King Midas:
Woodley I, p. 164. In Mythland, p. 89.
Language through Literature, Nature and Art, p. 153.
Stepping Stones II, p. 16.
The Crane Express:
In the Child's World, p. 14.
Pandora:
In Mythland, p. 5.

December

The Discontented Pine Tree: Reading Literature II, p. 35.
Children's Hour, p. 188.
The Loving Cup:
In Story Land. Harrison, p. 78.
Piccola:
Story Hour, Wiggin and Smith, p. 156.
Stories to Tell to Children, p. 90.
In Child's World. Poulsson, p. 129.

January

The Honest Woodman:
Child's World. Poulsson, p. 22.
Stepping Stones III, p. 24.
Why the Bear is Stumpy Tailed:
Nature Myths. Holbrook, p. 72.
How Fire Came to Men:
Nature Myths. Holbrook, p. 36.
Epaminondas and His Auntie:
Stories to Tell Children. Bryant, p. 63.

February

How Cedric Became a Knight:
In Storyland. Harrison, p. 143.
Stepping Stones IV, p. 55.
The Elves and the Shoemaker:
Fables and Folk Stories. Scudder, p. 30.
Stories to Tell Children. Bryant, p. 109.
Riverside, III, p. 13.
Philip's Valentine:
Child's World. Poulsson, p. 191.
Dick Whittington and His Cat:
Fifty Famous Stories. Baldwin, p. 140.
Old World Wonder Stories, p. 1.

March

Hans and the Four Big Giants:
In Storyland, p. 86.
The Hero of Haarlem:
How to Tell Stories. Bryant, p. 239.
Stepping Stones III, p. 119.
Richmond Second Reader, p. 84.
Child's World. Poulsson, p. 374.
Aeolus, The Keeper of the Winds:
In Mythland, p. 31.
Why the Woodpecker's Head is Red:
Nature Myths. Holbrook, p. 15.
Nature Myths. Cooke, p. 29.

April

The Pea Blossom:
Child's World. Poulsson, p. 53.
Kindergarten Stories and Morning Talks, p. 146.
Stepping Stones III, p. 17.

Sleeping Beauty:
Children's Hour, p. 141. Reading Literature II, p. 131.
Fairy Stories Every Child Should Know, p. 229.
The Lombardy Poplar:
Nature Readers II. Wilson p. 230.
Nature Myths. Cooke, p. 56.
The Dog and His Shadow:
Jones' Second Reader, p. 22.
Stepping Stones II, p. 59.

May

Little Goat Bruse:
Tales from the Norse, p. 264.
Fairy Stories and Fables, p. 20.
Rhymes and Stories. Lansing, p. 92.
Hansel and Gretel:
Reading Literature II, p. 137.
Fairy Stories Every Child Should Know, p. 35.
Snow White and Rose Red:
Fairy Tales. Grimm, p. 201.
Child Life. Second Reader, p. 88.
The House in the Woods:
Fairy Tales. Grimm.
The Golden Windows. Richards:
Pig Brother. L. Richards, p. 5.

June

Why the Morning Glory Climbs:
How to Tell Stories. Bryant, p. 137.
Star Dollars:
How to Tell Stories. Bryant, p. 156.
Boy and the Wolf:
Aesop's Fables.
Stories to Tell Children, p. 68.
Stepping Stones II, p. 23.
Beauty and the Beast:
Fairy Book. D. M. Craik.
Fairy Stories Every Child Should Know, p. 352.
Riverside III, p. 13.

STORIES FOR REPRODUCTION AND DRAMATIZATION

1. The Sleeping Apple.
2. The Fox and the Grapes.
3. Little Goat Bruse.
4. The Hare and the Tortoise.
5. The Four Musicians of Bremen.
6. The Hero of Haarlem.
7. Sleeping Beauty.
8. The Lombardy Poplar.
9. Epaminondas and His Auntie.
10. The Honest Woodman.
11. Hansel and Gretel.
12. The Golden Windows.
13. The Elves and the Shoemaker.

In addition to the reproduction and dramatization of three to six stories from the previous year children will be held responsible for six stories as a minimum requirement. Numbers 1 or 2, 3 or 4, 5 or 6, 7 or 8, are required from the above list; the teacher may select two others from the same list, and any others from previous lists. An *average of one story a month* for reproduction and dramatization is the maximum requirement. At the end of the year *each* child should be able to tell three stories presented during the year.

POEMS

September

Golden Rod
Little Folks' Lyrics, p. 22.
The Sun's Travels.
Stevenson. Child's Garden of Verse, p. 65.
Bed in Summer. (Review.)
Stevenson. Child's Garden of Verse, p. 16.
My Shadow. (Review and complete.)
Stevenson. Child's Garden of Verse, p. 44.
Autumn Fires.
Stevenson. Child's Garden of Verse, p. 144.

October

A Good Play.
Stevenson. Child's Garden of Verse, p. 35.
October's Party:
Nature Reader. Wilson, Bk. I, p. 47.
Hiawatha—select one of the following:
Hiawatha's Chickens.
Poems Every Child Should Know, Vol. I, p. 82.
Hiawatha's Canoe.
Reading Literature Reader, Bk. IV, p. 183.
Hunting the Red Deer.
Language through Literature, Nature and Art, p. 91.
The Fairies:
William Allingham. Golden Treasury Reader. Bk. III, p. 158.
Reading Literature Reader. Bk. II, p. 190.

November

The Lamplighter:
Stevenson. Child's Garden of Verse, p. 66.
Thanksgiving:
L. M. Child. Nature in Verse, p. 236.
Children's First Book of Poetry, p. 89.
Bill of Fare:
Eugene Field. Howe Reader. Bk. II, p. 40.

December

Santa Claus and the Mouse:
Child World. Poulsson, p. 122.
A Real Santa Claus:
Sherman. Little Folks' Lyrics, p. 53.
The Little Light:
Kate L. Brown.

January

The Rock-a-by-Lady:
Eugene Field. Carroll and Brooks Reader, Bk. II, p. 84.
The Children's First Book of Literature. Baker, p. 39.
The Land of Counterpane:
Stevenson. Child's Garden of Verse, p. 41.
Art Literature Reader. Bk. II, p. 22.
The Snow Flakes:
Nature Reader II. Wilson, p. 91.
The Ride to Bumpville:
Eugene Field Reader, p. 69.
The Naughty Doll:
Eugene Field.

February

Three Little Sisters:
E. L. McCord.
Marching Song. Review:
Stevenson. Child's Garden of Verse, p. 50.
Art Literature Reader. Bk. II, p. 28.
America (Two Stanzas.)
Smith. Poems Every Child Should Know, p. 228.
Stepping Stones II, p. 90.
The Drum:
Eugene Field. Eugene Field Reader, p. 24.

March

Pussy Willow:
Selected.
The Wind:
Stevenson. Child's Garden of Verse, p. 56.
Art Literature Reader. Bk. II, p. 23.
How the Violets Came.
Anon.
The Night Wind:
Eugene Field. Holton-Curry Reader, Bk. III, p. 44.

April

Rainbow Fairies:
Hadley. Language through Literature, Nature, and Art, p. 73.
Little Gustava:
Thaxter., Stepping Stones III, p. 35.
In Child's World. Poulsson, p. 329.
The Elf's Umbrella:
O. Herford. Horace Mann Reader, Bk. II, p. 132.
Japanese Lullaby:
Eugene Field. Nature in Verse, p. 179.

May

Where Go the Boats:
Stevenson. Child's Garden of Verse, p. 36.
How Do Robins Build Their Nests.
George Cooper.
The Dewdrop:
F. D. Sherman.
The Brown Thrush:
Lucy Larcom. Art Literature Reader III, p. 154.

June

Seven Times One:
Jean Ingelow. Woodley I, p. 14.
Stepping Stones II, p. 155.
The Discontented Buttercup:
Sara Orne Jewett. Aldine Second Reader, p. 81.
Daisies:
Sherman. Elson Second Reader, p. 153.
Nature Reader, Bk. I. Wilson, p. 92.
The Swing:
Stevenson. Child's Garden of Verse, p. 70.

SUGGESTED LIST

Any poems listed under Grade I.

Selections may be made from teachers' reference books and from children's library books, avoiding the presentation of any poems listed for Grade III.

SELECTIONS FOR MEMORIZING

1. Bed in Summer.
2. Golden Rod.
3. My Shadow.
4. Hiawatha's Chickens.
5. Autumn Fires.
6. Thanksgiving Day.
7. The Elf's Umbrella.
8. The Brown Thrush.
9. Marching Song.
10. Japanese Lullaby.
11. Rainbow Fairies.
12. Where Go the Boats.
13. Daisies.

Second year classes will be held responsible for six of the above poems, in addition to three poems memorized in First Grade. Numbers 1 or 2, 3 or 4, 5 or 6, 7 or 8, are required; the teacher may select three others from the above list, and any additional ones from previous lists. *An average of one poem* a month for memorizing is the maximum requirement. At the end of the year, *each* child should be able to recite three poems from the list.

THIRD GRADE

As in the second grade, the children will read many of the stories told and dramatized in the previous grade. Much of the reading material partakes of a literary character, supplementing the *oral* work in literature which, as before, includes both memorizing and oral expression. "Fundamentally, the method of all literature is the same, but each selection presents peculiar interests and problems. Special study and specific planning is essential to secure success." Appreciation of form and content, and growth in command of good English expression is the end sought.

It is desirable that certain types of stories such as the folk-tale, the modern fairy tale, the fable, the classic myth, and those dealing with some phases of child-life and activities of the outdoor world be continued in this grade.

Longer stories are now presented, though the short fable is not neglected. "Opportunities for varied and effective work are clearly defined, . . . as (1) reproduction in parts, in a complete whole, and (2) dramatization, (3) simple enjoyment." Much illustrative material consisting of pictures, blackboard illustration, and objects, is essential in presentation to secure clear-cut concepts. Motives for story-telling should be provided through the avenues of various school activities.

"Literature, especially poetry, is addressed primarily to the ear." For this reason a faithful oral rendering is the most effective means to appreciation. "The teacher must, therefore, be a good interpreter, and should seek to develop like power in the class." She should be able to read the poem with as good expression as possible, keeping it genuine and sincere.

Through a study of the pictures which each unit of thought presents, some insight into the imagery is gained. Helpful methods of memorizing are given by training in mastery of these successive units of thought as wholes. Memorizing should be done in class under the supervision of the teacher, and continued in study periods

and at home. Much attention should be given to the effective rendering of the poem, in order that the audience may enjoy it. Arouse proper enthusiasm and it will afford excellent training in English as well as add enjoyment to the spiritual life of the school.

The rhythm and imagery of poetry make a strong appeal to the imagination and memory, and, in addition to those learned in the previous grades, all pupils should learn at least six poems during the year. Many children will accomplish more. It should be borne in mind that most pupils will retain poems and stories learned in the earlier grades only by having them repeated from time to time under the stimulus of interest. Encourage the children to keep a record of the poems learned in all grades. If possible, provide each child with a printed copy, or have him make a copy in his poem book, and illustrate with cuttings or drawings.

Ethical and patriotic selections, nonsense verses, nature lyrics, and narrative poems each have their place, and care should be taken to provide for the varied interests of children. A sufficient number of stories and poems is listed for each month, enabling a teacher to make a choice suited to her purpose. One story for enjoyment, two for study and dramatization, and one poem memorized each month should give a distinctive class repertoire, and opportunities should be found in the morning exercise, in the rest period, in assemblies, on special occasions for recall of poems and stories already familiar. Frequency and recency of recall insure permanent retention of poems and stories which are now becoming a part of the child's literary inheritance.

Time Allotment: Three 15 minute periods or 45 minutes per week.

STORIES

September

Cinderella:
Reading Literature II, p. 49.
Fables and Folk Stories. Scudder, p. 58.

The Wise Men of Gotham:
Fifty Famous Stories. Baldwin, p. 39.

Boots and His Brothers:
Riverside II, p. 56. Reading Literature II, p. 38.

The Boy and the Wolf:
Stories to Tell to Children, p. 68.

October

Bell of Atri:
Fifty Famous Stories. Baldwin, p. 69.

Ceres:
In Mythland. Beckwith, p. 124.
Nature Reader II, p. 187.
Favorite Greek Myths. Hyde, p. 24.
Round the Year in Myth and Song, p. 52.

The Cat, the Monkey, and the Chestnut. Aesop:
Fables and Folk Stories. Scudder, p. 109.

Why the Rabbit's Tail is Short. Joel Chandler Harris.
Elson Reader, III, p. 53.

November

Moufflu. Story Hour, p. 59.

Little Pumpkin's Thanksgiving:
Elson III Reader, p. 123.

Riki-Tikki-Tavi:
Jungle Stories I. Kipling, p. 175.

The Barmecide Feast:
Fifty Famous Stories, p. 123.

December

Miss Muffet's Christmas Party. S. Crothers.
Why the Evergreens Keep their Leaves:
Nature Myths. Holbrook, p. 118.
How to Tell Stories. S. C. Bryant, p. 153.
The Golden Cobwebs:
How to Tell Stories. S. C. Bryant, p. 133.
Why the Chimes Rang:
Brooks Second Reader, p. 64.

January

Arachne:
Language Through Literature, Nature and Art, p. 88.
Nature Myths. Cooke, p. 19.
Old Greek Stories. Baldwin, p. 40.
The Master of the Land of the Nile:
Old Stories of the East. Baldwin, p. 51.
The Shepherd Lad Who Became King:
Old Stories of the East. Baldwin, p. 199.
Snow White and Rose Red:
Grimm's Fairy Tales, p. 201.
Child Life Second Reader, p. 88.

February

Androclus and the Lion:
Fifty Famous Stories. Baldwin, p. 87.
King John and the Abbot:
Fifty Famous Stories. Baldwin, p. 21.
The Red Thread of Courage:
How to Tell Stories. Bryant, p. 78.
For the Children's Hour. Bailey and Lewis.
Grace Darling:
Fifty Famous Stories, p. 61.

March

Sleeping Beauty:
Reading Literature II, p. 131.
King Alfred and the Cakes:
Fifty Famous Stories, p. 5.
The Legend of Arbutus:
In the Child's World, p. 375.

April

Why the Sea is Salt:
Reading Literature II, p. 97.
Tales from the Norse. Dasent, p. 8.
How to Tell Stories. Bryant, p. 215.
Nature Myths. Holbrook, p. 135.
The Story of Siegfried:
Richmond Second Reader, p. 90.
Baucis and Philemon:
In Mythland. Beckwith, p. 165.
Nature Myths. Cooke, p. 71.
Favorite Greek Myths. Hyde, p. 184.

May

The Brownies of Blednock:
Grierson. Elson Reader III, p. 9.
The Endless Tale:
Fifty Famous Stories. Baldwin, p. 127.
Phaeton:
Old Greek Stories. Baldwin, p. 36.
Diana; Latona and the Frogs:
In Mythland, p. 45.

June

Clytie:
Judd. Classic Myths, p. 165.
In the Child's World. Poullson, p. 374.
How Buttercups Came:
Old Tale. Elson Reader II, p. 152.
The Real Princess:
In Mythland. Beckwith, p. 5.
Pandora:
Free and Treadwell IV, p. 87.

NOTE. Selections may also be made from First and Second Year lists for review, but no stories listed for Fourth Year should be presented.

STORIES FOR REPRODUCTION AND DRAMATIZATION

1. The Wise Men of Gotham.
2. Ceres.
3. Barmecide Feast.
4. Why the Chimes Rang.
5. The Golden Cobwebs.
6. Arachne.
7. Snow White and Rose Red.
8. King John and the Abbot.
9. The Bell of Atri.
10. Siegfried.
11. Phaeton.
12. Baucis and Philemon.

In addition to the reproduction and dramatization of three to six stories from the previous year, children will be held responsible for six of the above stories as a minimum requirement. Numbers 1 or 2, 3 or 4, 5 or 6, 7 or 8, of the above list are required; teacher may select two others from the same list, and any other from previous lists.

An *average of one story a month* for reproduction and dramatization is the maximum requirement. At the end of the year *each* child should be able to tell freely three stories presented during the year.

POEMS

September

September. H. H. Jackson. Woodley I, p. 22.
Nature in Verse, p. 193.
Language Through Literature, Nature and Art, p. 20.
The Fairy's Table Cloth. Heath Reader III, p. 122.
The Duel. Eugene Field:
Poems Every Child Should Know, Vol. I, p. 18.
Eugene Field Reader, p. 56.

October

October's Bright Blue Weather.
H. H. Jackson. Nature in Verse, p. 206. Woodley I, p. 114.
How the Leaves Came Down:
Susan Coolidge. Language Through Literature, Nature and Art, p. 42.
Poems Every Child Should Know, Vol. I, p. 12.
Suppose:
Alice Cary. Nature in Verse, p. 47.

November

Dear Old November. Alice Cary.
Seeing Things at Night. J. W. Riley.
A Good Thanksgiving. Marian Douglas.
Good Bye to Summer. Wm. Allingham.

December

A Visit from St. Nicholas. Moore. Poems Every Child Should Know, Vol. I, p. 29. Stepping Stones IV, p. 72.
A Real Santa Claus:
Sherman. Little Folks' Lyrics, p. 53.
A Christmas Hymn. Richard Watson Gilder.

January

Wynken, Blynken and Nod:
Eugene Field. Stepping Stones IV, p. 132.
Poems Every Child Should Know, Vol. I, p. 16.
The Children's Hour:
H. W. Longfellow.
Sweet and Low:
A. Tennyson. Aldine Reader II, p. 69.
Poems Every Child Should Know, Vol. I, p. 27.
Snowflakes:
Nature Reader II, p. 91.
Little Folks' Lyrics, p. 93.

February

America (two stanzas).
Smith. Poems Every Child Should Know, p. 228.
Stepping Stones II, p. 90.
A Wonderful Weaver:
Stepping Stones, II, p. 98.
Language through Literature, Nature and Art, p. 109.
With Trumpet and Drum. Eugene Field.
Eugene Field Reader, p. 16.

March

The Tree:
Bjornson. Language through Literature, Nature and Art, p. 198.
Nature Reader II, p. 233.
Stepping Stones III, p. 73.
The Merry Brown Thrush. Lucy Larcom. William's Choice Lit. II, p. 146.
Windy Nights. Stevenson, p. 27.

April

The Child's World:
Stepping Stones III, p. 209.
The Voice of the Grass. Sara Roberts Boyle. Nature in Verse, p. 22.
Aldine III, p. 80.
Wishing. William Allingham. Reading Lit. IV, p. 348.
Nature in Verse, p. 49.
William's Choice Lit. III, p. 75.
A Laughing Chorus:
Language through Literature, Nature and Art, p. 191.
Clouds. Eudora Bumstead. Language through Literature, Nature and Art, p. 11.

May

Pussy Willow:
Child's World, p. 262.
Marjorie's Almanac:
Nature in Verse, p. 89.
The Dandelion:
Children's Hour, p. 196.
The Violet:
Taylor. Stepping Stones III, p. 111.
Poems Every Child Should Know, Vol. I, p. 27.

June

Fairy Folk. Wm. Allingham. Graded Literature III, p. 81.
Reading Lit. II, p. 190.
Little Orphant Annie. J. W. Riley.
Poems Every Child Should Know, Vol. I, p. 54.

Evening at the Farm. Trowbridge.
Child Classics IV, p. 78.
Poems Every Child Should Know, Vol. I, p. 90.

SUGGESTED LIST

Any poems listed under Grades I and II.

Selections may be made from Teachers' Reference Books and from Children's Library Books, avoiding the presentation of any poems listed for Grade IV.

SUGGESTED LIST

Seasonal:
September.
October's Bright Blue Weather.

Narrative:
How the Leaves Came Down.
The Child's World.
A Visit from St. Nicholas.

Humorous:
The Duel.

Patriotic:
America.
With Trumpet and Drum.

Fanciful:
Wishing.
Clouds.
Wynken, Blynken, and Nod.

Nature Lyrics:
A Laughing Chorus.
Dandelion.
Tree.
The Merry Brown Thrush.

Third year classes will be held responsible for six of the above poems in addition to those memorized in previous grades. One poem of each type is required; the teacher and children may select two or three others from the required list.

An *average of one poem* a month for memorizing is the maximum requirement. At the end of the year *each* child should be able to recite three poems learned during the year.

FOURTH GRADE

Though much of the reading material in this grade is of a literary character, oral work in literature occupies an important place in the school program. Poems and stories presented in previous grades should be recalled with pleasure and profit, often with the teacher of the previous year present as a guest. By this time each child should have a repertoire of at least a dozen good stories and poems ready for use upon call with a personal interest in each one.

Longer stories are presented in this grade and an attempt is made to have the children realize in a dim way that each great nation had its own literature by presenting a group of Greek Stories, Norse stories, German and English folk tales, East Indian legends, and others, not forgetting our own American literature, which expresses the national spirit. Only those selections best suited to the needs of fourth grade pupils will be presented; this does not necessarily exclude the best and most suitable material from any source whatsoever. The aim sought is to determine largely what the children will read voluntarily, and to lay the foundation for the command of good English expression.

Since this is the period when mechanical results are most easily obtained, memorizing of the best selections should be greatly em-

phasized. The rhythm and imagery of poetry make a strong appeal to the imagination and memory at this time. As in the previous grades the memorizing of longer poems should be done largely upon the basis of the unit of thought, and that thought clearly defined in the minds of the learner. At least six poems should be learned, and many children will learn more with a little encouragement. If possible, each pupil should be provided with a printed copy, or a poem book in which he may keep a record of all poems presented during the year, and illustrate them with simple sketches.

"Literature, especially poetry, is addressed to the ear,". . . and a faithful rendering is essential to the best results. The teacher should be able to read the poem with as good expression as possible, keeping it genuine and sincere. This will inspire the class with the same sincerity. The purpose of all literature, like all art, is to develop appreciation, and the attitude of the teacher determines the growth and exercise of judgment.

She needs the help of children to get the spirit of the selection through her own contagious enjoyment, through training them to grasp readily the meaning through her familiarity of the plan underlying each selection. They must form the habit of getting the main points in relation to minor details. Opportunities for varied and effective work are clearly defined, as (1) analysis of a story, followed by reproduction in parts and as a whole unit; (2) dramatization; (3) stories told and read for simple enjoyment. This last does not exclude the necessity for any treatment which brings the story nearer to their experience. Care should be exercised to preserve genuineness and sincerity of response to the appeals of both story and poem. It should be the child's own judgment rather than another's opinion which he expresses, and for this reason variety of material through which to make appeal is essential. Not all children can like all stories and all poems, but all children will like some poems and some stories better than others. Train them to be sincere and not sentimental.

For this reason, because experience indicates that children's interests are centered in heroic aspects of human life, in the outdoor world of nature and animal life, and of the preternatural, stories have been chosen with this in mind. Poems too, should be varied, and selections are made which appeal to the many-sided interests; the humorous, the narrative poem, the nature lyric, the patriotic selection, the imaginative or fanciful poem each has its place. The number listed for each month indicates the range from which a choice determined by the interest and ability of the class may be made. One

story read or told by the teacher for enjoyment, two for study, with adequate return from the children in reproduction and often dramatization, and one poem memorized each month should give a distinctive class repertoire.

Much illustrative material: sketches at blackboard, pictures, and objects—is still essential for clarity. A motive for story telling, and for recitation of poems is equally essential, and many activities of the school provide the opportunity to the wide-awake teacher.

Time Allotment: Three 20 minute periods or one hour per week; forty hours during the year.

NOTE: Since history is delayed until the first of November the time allotted to that study will be devoted to the study of the Norse, Greek and Roman Stories.

STORIES

September

Norse Stories:

How Thor Came by His Hammer;
Norse Stories, Mabie, p. 127.
Reading Literature IV, p. 11.
Review. Read from Third Grade reader and reproduce in parts.

How Loki Was Punished.
Norse Stories, p. 222.

Viking Tales. Hall. Read to children.

Death of Baldur. (Legend of the Mistletoe.) Reproduction, dramatization and written drama; this last, later in the year.
Norse Stories. Mabie, p. 197.
Classic Myths. Judd, p. 174.

OCTOBER

Greek Stories:

The Pomegranate Seed. Hawthorne. Read to children.
Reading Literature IV, p. 148.

Alexander and Bucephalus. Fifty Famous Stories. Baldwin, p. 106.

Prometheus. Lillian Hyde, p. 1. Read to children.

The Story of Troy. Bryant's Iliad. The Story of the Iliad by Jeannie Lang. Reproduction and dramatization.

November

Greek Stories: Continued.

The Story of Ulysses. Burt's Odysseus as suggestive in treatment.

The Story of the Odyssey. Jeannie Lang.

Jason and the Golden Fleece. Heroes of Myth. Price.
Favorite Greek Myths. Hyde, p. 84.

Narcissus. Classic Myths. Judd.

December

Roman Stories:

Damon and Pythias. Fifty Famous Stories. Baldwin, p. 100.

Horatius at the Bridge. Fifty Famous Stories. Baldwin, p. 91.

Christmas Stories:

Christmas at the Cratchits. Charles Dickens. Elson Fourth Reader, p. 122.

A Child's Dream of a Star. Charles Dickens. Read to children.
Christmas Stories. Dickens, p. 267.

The First Christmas. Read from "The Blue Flower" by Henry Van Dyke.
Language through Literature, Nature and Art, p. 117.

The Christmas Truants. Frank R. Stockton. Read to children.

The Legend of St. Christopher. Scudder. Stories from the Masters. Menefee, p. 81.

January

German Stories:

The Goose Girl. Great Opera Stories. Bender, p. 1. Read to children.

Hansel and Gretel. Great Opera Stories. Bender, p. 35. Dramatization.
Reading Literature II, p. 155.

The Flying Dutchman. Riverside Fourth Reader, p. 66. Scudder. Read by the children.

The Seven Ravens. Grimm's Fairy Tales.

February

Hero Stories:

William Tell. Fifty Famous Stories. Baldwin, p. 64. Reproduction and dramatization.

King Arthur and His Sword.
Adapted from "The Sword Excalibur" by Sir Thomas Malory. How To Tell Stories. Bryant, p. 205. Read to the children.
St. George and the Dragon. Elson Fourth Reader, p. 126.
The Boys, the Bees and the British. McCorkle. Elson Third Reader, p. 151. Reproduction.

March

Hero Stories: Continued.
Beowulf, the Brave Prince. Elson Fourth Reader, p. 191.
The Story of Ruth. Bible. Read to children.
Sir Walter Raleigh. Fifty Famous Stories. Baldwin, p. 54. Reproduction.

April

Spanish and French Stories:
Don Quixote and the Windmills. Adapted. Baldwin, p. 76. Read to children.
Jean Valjean and the Candlesticks. Adapted from Les Miserables. Hugo. Golden Path Book, p. 222.
Cosette. Adapted from Les Miserables. Hugo. Golden Path Book, p. 224.

East Indian and Celtic Tales:
Mowgli's Brothers. Jungle Book. Kipling, p. 1.
How the Fairies Came to America. Seumas McManus.
Billy Beg and His Bull.
Seumas McManus. How to Tell Stories, p. 225.

May and June

American Folk Lore and Other Stories.
Indian Legends:
The Star and the Water Lily. Baldwin and Bender VII, p. 31.
The Rabbit and the Tar Wolf.
Around the Lightwood Fire. Brevard, p. 119.
Why Mr. Billy Goat's Tail is Short.
The Tar Baby.
Daddy Jake, the Runaway, and other selections.
From the Uncle Remus Stories and Little Mr. Thimble-Finger Stories by Joel Chandler Harris.
The Spelling Match from "Emmy Lou." Martin.
The Pine Tree Shillings. Hawthorne. Language Reader IV, p. 240.
Grandfather's Stories. Hawthorne. Riverside V.
Old Pipes and the Dryad.
Fanciful Tales. Stockton.

STORIES FOR REPRODUCTION AND DRAMATIZATION

1. Death of Baldur.
2. The Trojan War.
3. Horatius at the Bridge.
4. Hansel and Gretel.
5. William Tell.
6. Jean Valjean and the Candlesticks.
7. The Boys, The Bees and the British.
8. Beowulf, the Brave Prince.
9. Alexander and Bucephalus.
10. The Pine Tree Shillings.
11. Old Pipes and the Dryad.
12. Narcissus.
13. The Legend of Arbutus.

Fourth year children will be held responsible for six of the above stories in addition to those from the preceding grade. Numbers 1 or 2, 3 or 4, 5 or 6, 7 or 8, of the above list are required; the teacher may select two others from the same list, and any additional ones from the grade list. An *average of one story a month* for reproduction and dramatization is the maximum requirement. At the end of the year *each* pupil should be able to tell freely three stories presented during the year.

POEMS

September

Bob White. George Cooper. Elson Fourth Reader, p. 148.
A Norse Lullaby. Eugene Field. Nature in Verse, p. 247.

October

October's Bright Blue Weather. H. H. Jackson. Review from Third Grade. Lessons in English, Woodley I, p. 114.
Fairy Folk. Allingham. Reading Literature II, p. 190.

Approved Selections for Reading and Memorizing III, p. 55.

Evening at the Farm. Trowbridge.
Poems Every Child Should Know, Vol. I, p. 90.

The Wind and the Moon. McDonald.
Poems Every Child Should Know, Vol. II, p. 111.

November

The Corn Song. J. G. Whittier. Read to children. One stanza memorized.
Language Reader IV, Baker & Carpenter, p. 256.

Mondamin. Longfellow's Hiawatha.
Language through Literature, Nature and Art, p. 334.

Little Brown Hands. Mary H. Krout.
Stepping Stones II, p. 146.

A Child's Thought of God. Elizabeth Barret Browning.

December

The Frost. Hannah Gould.
Poems Every Child Should Know, Vol. I, p. 39.

While Shepherds Watched their Flocks by Night. Nahum Tate.

Hey, Little Evergreens. Evaleen Stein.

January

The First Snowfall (four stanzas). J. R. Lowell.
Approved Selections for Reading and Memorizing VI, p. 42.

The Village Blacksmith. H. W. Longfellow.
Poems Every Child Should Know, Vol. I, p. 25.

Talking in their Sleep. Edith M. Thomas.
Language through Literature, Nature and Art, p. 38.

The Mountain and the Squirrel. Emerson.
Lessons in English. Woodley I, p. 33.

February

America. Smith.
Poems Every Child Should Know, Vol. III, p. 228.

The Flag Goes By. Henry H. Bennett.
Poems Every Child Should Know. Vol. II, p. 133.

Our Heroes. Cary.

The Quangle Wangle's Hat. E. Lear.
Elson Reader IV, p. 73.
Children's First Book of Poetry, p. 185.

March

The Wreck of the Hesperus. Longfellow. Read to the children.
Poems Every Child Should Know, Vol. II, p. 138.

Robert O'Lincoln. William Cullen Bryant.
Poems Every Child Should Know, Vol. I, p. 44.

The Fountain. J. R. Lowell.
Carroll and Brooks Reader IV, p. 39.

The Gladness of Nature. W. C. Bryant.
Language through Literature, Nature and Art, p. 229.
Woodley II, p. 108.

April

Raining. Robert Loveman.
Poems Every Child Should Know, Vol. I. Appendix a-6.

Calling the Violet:
Nature Reader II. Wilson, p. 217.

The Bluebird. Emily Huntington Miller.
Carroll and Brooks Reader IV, p. 173.

An April Day. Robert Southey.

May

There's Nothing Like a Rose. C. Rossetti.

The Circus Day Parade. J. W. Riley.
Art Lit. Reader IV, p. 17.

The Brook. Tennyson.
Poems Every Child Should Know. Vol. II, p. 153.

Under the Greenwood Tree. Shakespeare.
Horace Mann Reader IV, p. 274.
Elson Grammar School Reader III, p. 110.

June

Four Leaf Clover. Ella Higginson.
William's Choice Literature. Bk. II, p. 108. Elson Reader II.

Little Orphant Annie. J. W. Riley.
Poems Every Child Should Know, Vol. I, p. 54.

Dandelion. Nellie M. Garabrant.
Nature in Verse, p. 67.

POEMS SUGGESTED FOR MEMORIZING

Seasonal:
October's Bright Blue Weather.
The Gladness of Nature.

Narrative:
Evening at the Farm.
The Village Blacksmith.

Patriotic:
America.
The Flag Goes By.

Fanciful:
Fairy Folk.
A Norse Lullaby.

Humorous:
Circus Day Parade.
Quangle Wangle's Hat.
Nature Lyrics:
Calling the Violet.
Bob White.
The First Snowfall.
An April Day.
Raining.
The Brook.

Fourth year classes will be held responsible for six of the above poems, in addition to those memorized in previous grades. One poem of each type is required; the teacher and children may select two or three others which may be added to the required list. An *average of one poem a month* for memorizing is the maximum requirement. At the end of the year *each* pupil should be able to recite three poems learned during the year.

READING AND LITERATURE: GRAMMAR GRADES

SOME SUGGESTIONS AS AIDS TO THE TEACHING OF READING AND LITERATURE IN THE GRAMMAR GRADES

I. Literature: "Literature is art: it is one of the fine arts. We set it apart from other arts by the fact that it uses language as its medium and we set it apart from other writing by the fact that it uses language in the way that art must use it—not for technical purposes, not as a medium for teaching facts or doctrines, not to give information, but to produce artistic pleasure; not to conserve use, but to exhibit esthetic beauty."—MacClintock.

Literature as an art is not understood in the elementary school, as it should be, and any discussion that elucidates and emphasizes the right principles upon which to base a choice of stories for classroom use should be welcomed by the educational world. It is the emotional element in literature that places it above the sciences and classes it with the fine arts. It is most necessary that the right kind of literature be given to a child during his various stages of development, to meet his needs and tastes and to provide him with vicarious experience.

Chubb says of the child of the fifth and sixth grades:

> His world of men and things is growing wider and more populous; his mental grasp is increasing; his memory is more tenacious; he can hold more and more in his mind; he is probing more thoroughly into the causal connection of things; he is growing in power of observation and discrimination. His world is still the habitation of the great mythical and shadowy personages of the world's childhood, but it is also becoming peopled with modern heroes of industry and commerce, of the professions and the arts. He is still in what we may call the *epic phase*, and the longer he remains in it the better.
>
> Adventure and romance, heroisms, and daring, the wonders of excitement of travel and exploration, of march and siege, upon these we may feed him, and upon these, as sure foundations of the superstructure to be raised in later years, we may build. So we shall broaden his world and enlarge his sympathies, and give him a many-sided interest in all sorts and conditions of men and women, and in various callings and points of view, before he begins that adolescent work of introspection and self-analysis which tends to contract for a time his interests and sympathies. Here is the central epic interest!
>
> Nature interest will remain and grow apace! Interest in conquests and developments of civilization will be increasingly active.
>
> Lyric impulse will persist and deepen: it is through lyric poetry that we shall work for the chastening idealization of those primitive passions of anger, hate, devotion and love into their higher forms of courage, loyalty, obedience and reverence.

Purely lyric poetry comes to a child through song—songs sung in the daily assembly, songs sung in the classroom once or twice a day. It is an expression of childhood's spontaneous power. It should be as natural to take two or three minutes between recitations for a hearty song as for recess or calisthenics. . . .

Use literature as you use all studies—only more powerfully because of its greater emotional appeal—to illuminate and enchance the worth and glory of life and living, when training the pupil to the correct and effective use of language as a medium of communication:

1. Interest and delight must accompany all the work done in literature.
2. It should be done with an air of happy and dignified leisure.

II. Teaching Literature. Professor Thomas H. Briggs says:

The general aim of teaching literature, especially poetry, is that the teacher reproduce or awaken the emotion that possessed the artist and that through his work he is attempting to express. This central emotion, which often has important concomitants, necessarily varies much with the individual; indeed, it is a question whether the poem and the story should not be considered merely the stimulus to art, which is non-existent until the satisfying reaction of the individual.

The steps for the teacher to take, more or less consciously, then, are:

1. He must find and feel the central emotion.

2. He must decide what large function he wishes this poem or story to perform in the pupils:

   a. To afford entertainment, thus:
      1. Furnishing vicarious experience;
      2. Breaking monotony;
      3. Potentially raising the standards of taste;
   b. To interpret some phase of life, physical or spiritual.
   c. To prepare for some probable future experience.

3. He prepares his class when this is necessary, for references or allusions which at the reading should contribute, immediately to the emotional reaction. Vocabulary usually is better gotten in context as the specific need arises. The teacher may also prepare an "atmosphere" for the presentation.

4. He presents his poem or story. If it is especially difficult or dependent on beauty of style or music for its effect, the teacher should certainly read it aloud to the class.

5. He sees that the meaning is understood. This, however, is not an end, but a means; on meaning, feeling should in nearly all cases be based.

6. He tries by various devices to secure emotional response on the part of the pupil. These devices should be based usually on the fact that whenever the incident, description, or what not in the literature can, it should be interpreted in terms of the individual, in so far as he is likely to respond. These devices seek the fullness of meaning and suggestion of especially connotative words or phrases or situations; they include imaging, dramatizing, and illustrating by modern parallels.

7. He tries to set up the habit of using what has been studied: to entertain, to interpret some new piece of literature or life situation, or to prepare for something that is imminent. This frequently involves memorizing, which always should follow the enjoyment resulting from study. Passages to be memorized should have in them some potential and probable future usefulness, such as expressing effectively

a vaguely conceived idea, embodying and thus preserving an ideal, etc.; they should be learned as wholes and frequently used."

NOTE: This outline should be constantly varied according to the individual needs of the class, teacher, masterpiece, time, and community."

III. Reading material for grammar grades:

1. Material in reader, of which there should be one or more sets kept for class use, and distributed, for such purpose only as sight reading, to cultivate agility of mind, rapid seizure of thought, and clear, intelligent rendering. These will be pieces of minor importance, yet worth knowing, a single reading of which will suffice.

2. Other more difficult selections from the reader to be read aloud, as a test of power of comprehension and emotional responsiveness, after a preliminary silent reading and careful consideration. These will be pieces to which more importance attaches.

3. Short poems or pieces to be read at home, silently or aloud (practice reading), which have called for some research and annotation, or have had to be memorized. These will be the easier ballads and short narrative poems and pieces used for comparative purposes.

4. A few longer works—novels, or some of Scott's narrative poems (one for each term, perhaps), that are to be read at home in a given time, and then discussed in class.

5. The works, short, and moderately long, that form the "core" of the course, and receive careful treatment or thorough study in the class.

6. Works read to the class by the teacher which may be a little above the average reach of the class, the teacher aiding the interpretation. (See Chubb: *The Teaching of English*, pp. 143-144.)

7. *A graded list of classic stories and modern novels to be used as home and school extension reading.

IV. Kinds of reading:

1. Silent.
2. Oral.
3. Sight.

The pupil is concerned with *silent reading* primarily when studying his lessons—geography, literature, nature study, etc.; when reading books for pleasure; when studying a selection to read to some one else.

"The open and most inviting field in education today seems to be that of silent reading. Although it is the kind of reading done almost exclusively after school days, it is given special attention by only an occasional teacher, and by him experimentally, for there is little agreement as to what should be done in training for this kind of work.

"Silent reading . . . . rigidly excludes the other elements

*NOTE: This Course of Study was printed in 1915. In 1917 the United States entered the great world-war. Since the object of this war as avowed by President Wilson is to make the world safe for democracy it seems highly expedient that teachers of literature should use some poems and stories definitely and consciously to assist children in their understanding of customs and habits of thoughts of other nations as well as of our own, and that some of the best war literature be studied. Let it be remembered that one of our National ideals should be the understanding of the ideals of the other peoples of the world.

which enter into oral reading and the reading of literature. It is merely informational. And to read well silently, one must be able to read rapidly, to change his pace as the difficulty of the subject-matter requires, and be able to summarize with some accuracy what he has gone over." (Briggs.)

He is concerned with *oral reading* (a) when the teacher reads to him for the purpose of instruction, to supplement his daily studies, or to give him pleasure by the presentation of a piece of literary art—in either case, he must grasp the thought and form of the material quickly and accurately; (b) when he reads aloud to the class from any text for the purpose of conveying information, or for the pleasure of reading a story or poem (interpreting literature).

He is concerned with *sight reading* when he is called upon unexpectedly to read an article upon some topic under discussion, a reference book, or the scriptures, and in the ordinary reading of newspaper articles.

Sight reading can be both *oral* and *silent.* The value of sight reading is that it "stimulates the pace of the eye and affords practice in grasping groups of words that contain units of thought . . . . When the sight reader finishes the part assigned him, he should be asked to give in his own words the sense of the matter. And he must be made to feel that, unless he can do this, he has failed, however rapidly he has gone. If the sight reading be oral, he must get the sense himself and also cause his hearer to get it. . . . The primary aim is that he shall form the habit of sending the eye forward regularly to report new groups of words while the mind is comprehending and the mouth reporting what the eye has passed over."

V. The purposes of reading are:

1. To get thought from the printed page;
2. To give pleasure to others;
3. To get pleasure for one's self.

VI. Difficulties:

1. New words;
2. Familiar words in unfamiliar meaning;
3. Phrases that are puzzling;
4. Unfamiliar idioms;
5. Regular sentences, regular in form, but of complicated structure;
6. Peculiar customs and institutions not found in the child's own environment;

7. Now and then acts that are incomprehensible to the child;
8. Situations and conduct that challenge and bewilder the child's ethical judgment.

These must be overcome, and this can be done only by having reading preparation periods.

VII. Reading preparation periods:

The nature of this period is two-fold, consisting of (1) silent study-reading assignments mainly for interpretation and appreciation; and (2) formal exercises.

1. *The assignment for study:* "Here the definiteness and skill of the teacher's questions should tend to awaken curosity and interest in the work; to give the class a glimpse of the pleasure that awaits it in the final study; and to pave the way to an easier mastery of the verbal difficulties, the new and difficult words, and of obscure and involved passages." The following are suggestive procedures:

READING PROCEDURES

Procedure I:

a. *Study or Silent Reading.* Precedes the recitation period. Thought-provoking questions are given by the teacher and the pupils must search through the text for the answers. Interpretation is the basal idea.

b. *Recitation Period.* This is a discussion period which tests what was done in the study period. Misconceptions are cleared up and new ideas developed.

Procedure II:

a. *Study or Silent Reading.* (Same as I-a.)

b. *Recitation Period.* All books are closed, except that of the pupil who is called on to read. The reading is followed by a class criticism, the standards for criticism being definitely known by each child.

Procedure III:

a. *Study or Silent Reading.* Each child reads a different book or story, and prepares to read to the class the most interesting incident in his story. He must be able to give a brief synopsis of the events preceding and succeeding his chosen incident.

b. *Recitation Period.* One child at a time, reads. Class criticises and discusses. (There should be a card catalogue of all the stories read and of all the books handled. Each child should make an individual card catalogue of the books he would like to read.)

Procedure IV:

a. *Study or Silent Reading.* Each child, with a book chosen either by himself or the teacher, studies to make a written report of his opinion of the story. He also writes a brief synopsis of the story.

b. *Recitation Period.* Teacher works only with the pupils who are poor readers.

Procedure V:

a. *Study or Silent Reading.* Choosing and studying a story to read to a lower grade class or at a school assembly. The choice of the pupils who are to read is made by the class, not the teacher. This study period could also be an impromptu dramatization, the pupils working in groups upon the different scenes or acts.

b. *Recitation Period.* Choosing the pupils to read. They give specimen readings of the story. (The class makes the choice.)

Procedure VI:

a. *Study or Silent Reading.* The pupils read and make thought-provoking questions.

b. *Recitation Period.* They ask their questions and call upon other pupils to answer and, after searching the text, these other pupils use, as far as possible, the words of the text in their answers. Class discussion follows.

The following definite silent-study-and-discussion plan is based upon the story of Baldur, pp. 165–169 in the Stepping Stones to Literature Reader for the fifth grade and was worked out in classroom by Miss Miriam Van Sant of the Catonsville High School:

I. The Reading Seatwook or Study Assignment

1. Read the story of Baldur, pp. 165–169. Read also to p. 176 if there is time.
2. Read carefully. Use dictionaries and pronouncing vocabulary in the back of the book.
3. About what people is this story told?
4. Baldur took the place of what gods in Greece and Rome?
5. Why was it natural for these people to worship the sun god?
6. From your knowledge of mythology and geography explain what the death of Baldur might mean (remember that he was the sun god); give the meaning of the funeral pyre.
7. Why was it necessary for Baldur to follow the fate woven by the Nornies?
8. What is Valhalla? Does it remind you of any other place we have read about?
9. What poet has based a poem on this story?
10. What kind of poem is it?
11. Ask three questions you would like to have answered.

II. Questions the Children Brought to the Class Discussion

1. Why did they burn Baldur?
2. Why should they have a feast at a funeral?
3. How did Nanna die?
4. Who slew Höder?

5. Why didn't Odin weep for his son?
6. Why should gods hate anyone?
7. Why should Baldur have been the "best beloved of gods?"
8. Why should anyone who was a god have such wicked desires as Loke?
9. Where did they get the idea of the blind brother, Höder?

III. Procedure in the Reading Lesson

The children studied the assignment, consulting with each other when necessary, about the meaning of phrases, or words, and the answers to the questions.

When we took up the lesson they asked their questions first, answering each other when possible. Their questions brought out the primitive character of the Norse people and the fact that gods never really existed, but that the people themselves invented them and then stories about them to explain natural phenomena.

The children then answered the questions in the reading assignment, reading passages from the story, and occasionally from the poem, to prove a point in their discussion.

They compared the gods in Scandinavia with the Greek and Roman gods with which they were already familiar.

They said that since the sun went away from these people for such a long time, when it came to them in the summer season naturally they loved it because it gave them light and heat and made things grow.

The class had been much interested in the Land of the Midnight Sun, and the pupils had very little trouble in deciding that probably these people wondered where the sun had gone when it left them, so they made up this story about it to answer their own queries. Some of the pupils reasoned this out from the story of Proserpine too, which gives the symbolism for winter and summer. Again the class decided that the Norsemen must have seen something to make them believe that Baldur was burned, and one child said that since this is the Land of the Midnight Sun, which has the *aurora borealis* or northern lights, these lights might have been the origin of the funeral pyre. The class pretty generally conceded this.

From the belief of Odin that Baldur must die because the fate was spun for him, the children drew the inference that the Scandinavians must have believed in fate rather than man's power to shape his own life.

This grade has become interested in poetry, so they decided that they wanted to read the poem next (pp. 169–176); and then classified it as a story-telling or epic poem. These boys and girls are quite proud, by the way, of knowing an epic from a lyric poem.

By the time we had finished discussing the questions and the assignment questions, much of the story had been read incidentally. Then I called on several members of the class to read the story through, in parts, each child reading a scene or some organized unit of literary thought.

What had we really accomplished? The pupils had read the lesson through silently. Then they had proceeded to study it through thought-provoking questions. As they studied, through their own initiative they thought out questions. Then in class recitation time with the results of their study before them, they discussed the lesson with the teacher. This led to challenging, one pupil making another prove his point by reading from the text-book, until much of the story was read orally, though not in the sequence of the text. Then to synthesize the whole matter when the discussion was finished, the story was read orally, and we trust with more appreciation of its beauty and literary value than could possibly have been the case had there been no intensive study in the silent reading period.

2. *Formal exercises:* Continue to give special lessons (a) for interpreting diacritical marks, (b) for getting the meaning of difficult words through the context, (c) in the use of the dictionary for the meaning of new words and for discriminating between the several definitions of individual words. Both teacher and child should get the *dictionary habit.* If the children do not understand diacritical markings and the phonetic laws, teach these through frequent drills.

"To be 'well spoken' is still a strong point in a man's favor in many walks of life. The pleasant voice and delivery, the breeding implied in correct speech, the evidence of character and culture in the touch of distinction in the vocabulary, the power of graphic description and narration, these things have sometimes even commercial value; while, ability to read and write agreeably, to debate and argue effectively is almost everywhere a valuable asset, and in certain callings—political, ministerial, legal—an indispensable condition of success."

REFERENCES: Webster, *Standard Dictionary*, Merriam and Company; *The Dictionary Habit* (Free on request); Greenough and Kittredge, *Words and Their Ways in English Speech*, Macmillan; Anderson, *A Study of English Words*, A. B. Co.; Ives, *Phonetics for Schools*, Longmans; Southworth and Arnold, *See and Say Readers*, Bk. IV (Manual for the teacher), Ginn.

VIII. Dramatics.

The following suggestions for dramatization and the use of the dramatic instinct of the grammar grade child are taken from Briggs and Coffman, *Reading in the Public Schools*, pp. 233–261:

As has been shown earlier in the book, dramatic presentation of the reading material in the primary grades is in many ways exceedingly helpful. Strangely enough, teachers often, after that point, stifle the dramatic instinct of children until the high school undertakes to present a "sure enough" play at the opera house. No wonder that often becomes drudgery!

It has seemed wise, however, in many schools to continue the dramatic element of the reading lesson, somewhat modified perhaps, straight through the grades. In cases where this is done, there is a unanimous and enthusiastic opinion that it is well worth while. It has also been undertaken with profit in the upper grades of schools where no dramatic work at all, or practically none, has preceded. In this latter case, however, it has to be initiated very carefully, or the already too self-conscious upper-grade child will flatly rebel at what he considers foolishness.

1. Advantages: Taken so simply as this, dramatic work differs little from the ordinary class reading, except that it is apt to inspire much more interest and lead to a keener insight. It also gives the child something definite to do in that usually most indefinite of things, the preparation of the reading lesson. When practicable, children should be given some place about the school house, where, singly or in groups, they may rehearse orally their interpretation of the reading lesson. Some children, it is objected, cannot be trusted to study out of sight of the teacher. It is equally true, however, that some children should be so trusted—and held to account for results. After the novelty wears off, the right kind of encouragement and pressure will bring results.

2. Interpretative vs. Imitative: This so-called dramatic reading should be interpretative and suggestive, rather than imitative. It is better for the pupil, by his reading and slight acting, to make the auditors imagine how the character looked than it is to look the part himself. Of the two extremes, it seems wiser to err on this side than to overdo the matter of imitation; though some teachers think otherwise, holding that eventually much of the exaggeration will fall away or be more wisely

used. But most oral reading in life will be of the suggestive kind, which, indeed, is harder to do perfectly than acting.

3. Justification: Much of the success of this kind of reading depends upon the teacher's attitude toward it. It should be taken as a matter of course, undue preparation tending to make the children too conscious of themselves for the best results. It should be taken seriously, too, though not funereally. There are always children in all grades beyond the primary who are ready to giggle at and make a joke of anything unusual. If they are permitted to attempt simple dramatization in this spirit, they not only can accomplish nothing themselves, but they also prevent the other children from entering easily into the land of make-believe. When there is anything amusing in the dramatic work, the laugh will come, and of course should come; but it is joyous laughter, with the actor, in harmony with what he is saying or doing, not the miserable, withering laugh of ridicule, which usually comes from those who are themselves most impotent. It is a shameful thing when it is permitted to prevent or to hinder honest effort of any kind. Yet a teacher who fails to get the point of view of the child that is reciting sometimes not only permits it, but even joins in such laughter himself. If the teacher is unable to get into the spirit of the reading, if he does not really enjoy the dramatic presentation of the lesson, probably he would better not attempt it at all.

4. Public performances: When it is desirable, as it sometimes is, to give a real play with costumes, stage, and an audience of townspeople, nothing is more essential than a strong feeling of interest, and a desire on the part of most of the children to undertake the work. It may be that the proper spirit is already in the class; it may be that it can be aroused merely by the novelty, its attendant excitement, and the desire for display, which is strong in many children. Sometimes the idea of being dressed-up in costume is the needed stimulus. Few things are so effective, however, as the knowledge that other and older students have given successful plays. Some one who has taken part in a high school or a college play, or who has seen one, can often, by telling of it, give the needed stimulus, especially if the pictures of the scenes and cast in costume are shown. Many schools have souvenir books of their plays, which can be bought or borrowed for this purpose.

5. The selection of a play: The selection of a good play—a play that is interesting, clean, of the proper subject and length, demanding such proportion of boys and girls as the class affords, and interesting—is sometimes an insuperable obstacle. Good plays of any kind are hard to find, and the selection of a school play is hedged about with many requirements.

REFERENCES: Needham, *Folk Festivals*, Huebsch; Bates and Orr, *Pageants and Pageantry*, Ginn; Chubb, *Festivals and Plays*, Harper; Merington, *Festival Plays*, Duffield; Fry, *Educational Dramatics*, Moffat, Yard & Co.

IX. Scientific testing and standard scores for efficiency in reading:

"It is obvious that educational science and educational practice alike need more objective, more accurate and more convenient measures of—

(1) a pupil's ability to pronounce words and sentences seen;

(2) a pupil's ability to understand the meaning of words and sentences seen;

(3) a pupil's ability to appreciate and enjoy what we roughly call good literature;

(4) a pupil's ability to read orally, clearly and effectively.

Any progress toward measuring how well a child can read with something of the objectivity, precision, commensurability, and convenience which characterize our

measurements of how tall he is, how much he can lift with his back or squeeze with his hand, or how acute his vision is, would be of great help in grading, promoting, testing the value of methods of teaching, and in every other case where we need to know ourselves how well an individual, or a class, or a school population can read." —Thorndike.

The tremendous range of individual variation [in the rate of reading and power to understand what is read] is proof that in the teaching of reading the school at present has little control over the product.

The primary value of standard scores [will be to let each child grow in his own way and progress at his own rate toward the goal of efficiency in reading]. They also serve the teacher as a guide in the assignment of lessons. It is a simple matter to estimate by means of the number of words in a line and the number of lines on a page the length of time it will take to read over once a passage in a textbook.

Reading and reference lessons are too often assigned without regard to the time required to read the material over thoroughly, with the result that children are soon confirmed in the habit of hasty reading without assimilation. Teachers everywhere, following the general method of this study, should determine the average rate of reading of their classes in the various types of textbooks used by their pupils and assign all reference reading with such standard rates in mind.

For the benefit of those who have not given the matter thought heretofore, the following objective standards are suggested, as those now available for practical school work:

A child in Grade IV, V, VI, VII, VIII should be able to read simple prose at the rate of 160, 180, 220, 250, 280 words per minute respectively and to be able to reproduce 50 per cent of the ideas in a 400-word passage after one reading."—S. A. Courtis.

X. Reading errors: Thorndike indicates and enumerates the reading errors in the following selection. The list seems to be comprehensive but may not be exhaustive; the teacher should add to it other types of errors she may note in the reading of her pupils:

In order to illustrate clearly the character of errors considered and the method of recording them the following paragraph is presented:

The sun pier'ced into $\frac{\text{many}}{\text{my}}$ large windows. It was the op(e)ning of October, and the clear $\wedge$ sky was (of)a dazzling blue. I looked out of the window (and) down the street. The white house(s) of the long st(r)aight streets were (al)most painful to the eyes. The clear atmosphere allowed full play to the sun's brightness.

List of errors:

"Pier'ced"—dividing a one-syllable word into two syllables.

"My" "many"—an error made by substitution.

"Op(e)ning"—omitting a letter, poor enunciation.

"Clear"—adding a word.

"of" }
"and" }—omitting a word.

"dāzzling"—pronouncing long "a" for short "a."

"house(s)"—leaving off a final letter.

"st(r)aight"—omitting a letter.

"al"—omitting a syllable.

"atmosphere"—by a gross mispronunciation.

"allowed"—pronouncing long "o" for the "o" as in "out."

REFERENCES: Thorndike, *The Measurement of Ability in Reading*, Teachers College Record, September, 1914: The Fourteenth Year Book of the National Society for the Study of Education, Part I, *"Minimum Essentials in Elementary School Subjects."* The Seventh Year Book of the National Society for the Study of Education, Part II; Thorndike, *An Improved Scale for Measuring Ability in Reading*, Teachers College Record, November, 1915, and January, 1916;

Thorndike, *Measurement of Achievement in Reading, Word Knowledge*, Teachers College Record, November, 1916;

Kelley: *Thorndike's Reading Scale Adapted to Individual Testing*, Teachers College Record, May, 1917;

Thorndike, *Reading as Reasoning*;

Whipple & Curtis, *Preliminary Investigation of Skimming in Reading*;

Peters, *The Influence of Speed Drills Upon the Rate and Effectiveness of Silent Reading*, Journal of Educational Psychology, June, 1917.

XI. Readers for the grade:

It is not likely that any of the many existing readers will be entirely satisfactory to the teacher who is trying to live up to a high standard of literary subject matter. Therefore selections should be chosen from the reader, some selections rejected altogether, and the rest classified according to seasonal interests, informational interests like geography and history, and purely literary interests. It will be seen at once that there must be supplementary reading.

XII. Home and school extension reading:

"There are always some girls and boys, especially boys, who do not care for reading, and there are others who become so infatuated by books that they read everything that they can procure. If this reading leaves its mark in subtle manner—and one can hardly doubt that it does—it is certainly the part of wisdom to direct it as carefully as possible. . . . . .

"One giving advice must find out first of all what lines the child's interest follows; then he must know what books will satisfy or direct that interest; and finally he must learn how to accomplish the substitution with some tact."

Stanley Hall says:

"Throughout the teens . . . . books were chosen . . . . because recommended, and later because of some special interest. Girls relied on recommendations more than boys. The latter were more guided by reason and the former by sentiment. Nearly three times as many boys in the early teens chose books because they were exciting or venturesome. . . . Girls chose books more than four times as often because of children in them, and more often because they were funny. Boys care very little for style, but must have

incidents and heroes. . . . . Girls prefer domestic stories and those with characters like themselves and scenes more like those with which they are familiar."

We have carefully prepared graded lists of books to meet this need of more extensive and varied reading than the texts for the grade provide. The child who does not like to read must be encouraged to read; the child who reads too much and without discrimination must have his habit directed by tactful suggestion; the child who is constantly reading but never knows what he has read must be helped to read more intelligently; the child who reads too many novels must be led to an interest in other kinds of literature if his intellect is to be strengthened.

Because of all these conditions which prevail in all groups of children, we have established a system of credits for extra reading of the right kind; five books from our "Home and School" list, or from any list approved by the teacher, read each half-year, entitles the child to an extra credit in one of the English subjects: reading, literature, or composition—according to the best use to which he puts the reading. But the extra credit is not given until the child has handed in to the teacher a satisfactory written report of each book as it is read; for this purpose we have outlined such a report. The same outline is used for all the grades, but a fifth grade report would, of course, be very much simpler than that of an eighth grade child. Both the lists and suggested outlines for the report are printed in the courses for the different grades.

REFERENCES Baker, *Studies in the Teaching of English* Teachers College Record; Carpenter, Baker and Scott, *The Teaching of English*, Longmans Green; Chubb, *The Teaching of English*, Macmillan; Hosic, James Fleming, *The Elementary Course in English*, Univ. of Chicago; Rogers, Helen H. and Peet, Harriet E., *Course of Study in Reading and Literature:* Ballads, See Atlantic Educational Journal, *Ballad Poetry*, by Annette Hopkins, 1908-09; *A Study of Ballads*, by Georgia MacDonnal, 1914-15; Colby, *Literature and Life in School*, Houghton, Mifflin Co.; Corson, Hiram, *The Aims of Literature Study*, Macmillan; Cox, *Literature in the Common Schools*, Little Brown; MacClintock, *Literature in the Elementary School*, Univ. of Chicago; Briggs and Coffman, *Reading in the Public Schools*, Row, Peterson Co; Huey, *The Psychology and Pedagogy of Reading*, Macmillan; Laing, *Reading and How to Teach It*, Heath Co.; McMurry, *Special Method in Reading for the Grades*, Macmillan; Klapper, *Teaching Children to Read*, Appleton; Haliburton, *The Teaching of Poetry*, Houghton, Mifflin; Keyes, Angelo M., *Stories and Story Telling*, Appleton; Burt, *Poems Every Child Should Know*, Doubleday, Page; Stevenson, *Days and Deeds*, (Anthology), Baker & Taylor Co.; Tappan, *The Story Hour*, 10 vols. (Selections for all grades), Houghton, Mifflin; Chubb, *Stories of Authors*, Sturgis & Walton.

FIFTH GRADE

I. The intermediate and grammar grade period of the child's development. "In each of these nascent periods important physical and mental changes are occurring in the child. During the intermediate period

the brain assumes its normal size, the sensation-centers are knitted together, and the nerve-connections increase in number and function. Compared with the preceding period, it is characterized by relatively slow growth, and yet there is an abundance of 'excess' energy. The period is formative in the sense that the wandering, involuntary, passive attention tends to give way, under proper guidance, to the definite, active, voluntary attention, and in the sense that moral habits, habits of honor, and those referring to the commoner virtues, as well as habits of study, receive an impetus or trend that likely leads to their fixation."

II. Characteristics of the period.

"The child at this time in his life, has great powers of endurance. It is the time for storing reserve energy. Although his conduct and character are variable and inconstant, they are greatly influenced by pressure. In referring to this period, President Hall says:

"Never again will there be such susceptibility to drill and discipline, such plasticity to habituation or such ready adjustment to new conditions. It is the age of external and mechanical training. Reading, writing, drawing, manual training, musical technique, foreign tongues and their pronunciations, the manipulation of numbers and of geometrical elements, and many kinds of skill, have now their golden hour, and if it passes unimproved, all these can never be acquired later without a heavy handicap of disadvantage and loss. The method should be mechanical, repetitive, authoritative, dogmatic. The automatic powers are now at their very apex, and they can do and bear more than our degenerate pedagogy knows or dreams of."

"During the primary grades, imitation and example are prominent; during the intermediate grades, *authority and precept are prominent.* This does not mean that all the material given the child is or must be intrinsically uninteresting. Quite the contrary is true; it ought to be all the more interesting; but unless the child finds it so, he must be required to master enough of the rudiments of the subject to furnish a basis for interest. When he has no will, it must be supplied by his experienced teacher and parent."

III. Aims in training.

"As more than three-fourths of all our experiences function as habit, we readily recognize the extreme importance of fully utilizing this period. The mind must be stored with subject-matter, although the memory is not yet highly associative. Whatever impressions are received should be deepened by repetitions. All drill subjects and drill

phases of other subjects should be rendered as nearly automatic as possible. The mechanics of reading begun in the preceding grades must now be made habitual. The child must now acquire the dictionary habit, the skills used in articulation and pronunciation, the proper emotional response to the different kinds of reading material; and an abundance of worthy literary selections should be committed." (See Briggs and Coffman, pp. 140-141.)

NOTE: Read carefully "Suggestions for the teaching of reading and literature in the Grammar Grades," pp. 59–70.

Text: (Arranged in the order of their difficulty).

The following order of use of basal texts for the grade is meant in no wise to be arbitrary. Since most of our County schools have on hand sets of the *Stepping Stones to Literature*, the aim should be to use the literary material these readers contain, to the best advantage, but teachers are free to discard the didactic material because ample opportunity is provided for the reading of such material in the other subjects of the day's program: history, geography, hygiene, industrial arts. If a teacher prefers to select for the first reading text in this grade either *Favorite Greek Myths* or the *Riverside Fifth Reader*, or a set of books from the office that may be simpler than either of these, she is free to do so. But since Robin Hood presents greater difficulties than either of the other texts listed, it seems advisable that she should not undertake it until the second semester of the year. A wise teacher will "bait" the reading appetite and reading effort of her class by holding out to her pupils as a reward for achievement, the reading of Robin Hood as soon as they have made an effort to reach the reading standard for the first half-year's work.

1. Riverside Fifth Reader.
2. Stepping Stones to Literature. A Fifth Reader. (Read all the readable stories except the King of the Golden River; reserve that for the Sixth Grade.)
3. Hyde. Favorite Greek Myths.
4. Pyle. Robin Hood.
5. A set or several sets of readers to be borrowed from the office.

Sets of Books that may be borrowed from the Office.

Title	*Author*	*Publisher*
Peter Pan	Barrie	Scribner & Sons
Mr. Wind and Madam Rain	de Musset	Harper
The Dog of Flanders	Ouida	Educational Pub. Co.
Jishib, the Ojibwa	Jenks	
Stories Every Child Should Know, (Vol. II.)	Kipling	Doubleday, Page & Co.

Time Allotment: *50 min. per day.*

HOME AND SCHOOL EXTENSION READING

Such a list of books must be varied to meet the needs of the fifth grade pupil who has intellectual tastes beyond his years and also of

the child who is interested only in the simpler stories. This list attempts to provide for all ranges of literary appreciation. The teacher is at liberty to discard and substitute.

After a pupil has read one of the books on the Home and School Extension Reading List, he must hand in the following report, filled out to the teacher's satisfaction. Ten such reports for the year entitle the pupil to extra credits in his English work.

REPORT TO BE HANDED IN

1. Title———Author———Publisher———.
2. Classify the book as:
   novel
   story of adventure
3. Characterize it as:
   humorous
   pathetic
   thrilling
   dry
4. Name the chief characters (not more than five) giving the most prominent characteristics of each.
5. Where is the scene laid, and in what period of time?
6. Relate the incident you liked best, or describe the most vivid scene in the book.
7. Would you recommend the book to other members of the class? Why?

EXTENSION LIST

The Wonder Clock, Pyle, Harper Bros.; *Little Men*, Alcott, Little, Brown; *Little Women*, Alcott, Little, Brown; *Through the Looking Glass*, Carroll, Crowell or Harper & Bro.; *Alice's Adventures in Wonderland*, Carroll, Crowell or Harper & Bro.; *The Heart of a Boy*, De Amicis, Crowell; *Uncle Remus*, Joel Chandler Harris, D. Appleton & Co.; *A Boy's King Arthur*, Lanier, Chas. Scribner's Sons; *A Boy's Froissart*, Lanier, Chas. Scribner's Sons; *The Iliad*, Lang, Leaf and Myer, Macmillan Company; *The Dog of Flanders*, Ouida, Educational Pub. Co.; *The Nurnberg Stove*, Ouida, Educational Pub. Co.; *Picciola*, Saintine, Burt's Home Library; *The Book of Friendly Giants*, Eunice Fuller, Century Co.; *Two Little Savages*, Seton-Thompson, Chas. Scribner's Sons; *The Wonder Book of Horses*, Baldwin; *Jungle Book*, Kipling, Century Company; *Jungle Book 2*, Kipling, Century Company; *Just So Stories*, Kipling, Century Company; *Rebecca of Sunny Brook Farm*, K. D. Wiggin, Houghton-Mifflin; *Little Lord Fauntleroy*, F. H. Burnett, Scribner & Sons; *Hans Brinker*, M. M. Dodge, Scribner & Sons; *Friday's Child*, F. E. Crompton, Dutton Co.; *Story of a Bad Boy*, Aldrich, Houghton-Mifflin; *The Birds' Christmas Carol*, K. D. Wiggin, Houghton-Mifflin; *The Blue Fairy Book*, Lang, Longmans, Green; *The Red Fairy Book*, Lang, Longmans Green; *Five Little Peppers*, Margaret Sidney, Lee & Shepard; *Century Historical Readers*, 6 vols, Century Company; *Robinson Crusoe*, Defoe, Everyman's Library; *The Scottish Chiefs*, Jane Porter, Burt Co.; *Book of Golden Deeds*, Charlotte M. Yonge, Burt Co.; *Elizabeth's Charm String*, Cora Forbes, Little, Brown & Co.; *Panama, Past and Present*, Bishop, Century Co.; *Careers of Danger and Daring*, Moffett, Century Co.; *Peter Pan*, Barrie, Scribner & Sons; *The Bluebird*, Maeterlinck, Silver, Burdett & Co.; *The Piper*, Peabody, Houghton-Mifflin; *Wild Animals I Have Known*, Seton-Thompson, Scribner & Sons; *Two Little Savages*, Seton-Thompson, Scribner & Sons; *Puck of Pook's Hill*, Kipling, Doubleday, Page; *Mr. Wind and Madam Rain*, De Musset, Harper; *King Arthur Stories from Mallory*, Stevens and Allen, Houghton-Mifflin; *Rackety-Packetty-House*, Frances Hodgson Burnett, Century.

POETRY AND STORIES

I. POEMS FOR MEMORIZING.

(Select one for each month)

NOTE: Upon request, copies of these poems may be obtained from the office of the supervisor.

Autumn: Down to Sleep, H. H. Jackson; *The Faery Song*, Keats.

Winter: Peboan, the Winter, Longfellow's *Hiawatha*, (The White Man's Foot, Lines 1-99). *Christmas Poem*, Margaret Deland, *Everywhere, Everywhere, Christmas Tonight*, Phillips Brooks.

Spring: March, Bryant; *The Song Sparrow*, Van Dyke; *An English Apple Orchard in the Spring*, Martin.

Miscellaneous: In School Days, Whittier (Retrospective); *The Swimmin' Hole*, Riley (Boy nature); *A Norse Lullaby*, Field; *A Day*, Emily Dickinson, (Sunrise and sunset); *The King of Denmark's Ride*, C. E. Norton (Sad); *The Law of the Jungle*, Kipling (Ethical); *Opportunity*, E. R. Sill (Ethical); *Daybreak*, Longfellow; *Sir Patrick Spens*, (Ballad); *Incident of the French Camp*, Browning (War and courage); *The Wind and the Moon*, George MacDonald (Humorous); *The Donkey and the Mocking Bird*, Bryant (Humorous).

Patriotic: Columbia, Miller; *Old Glory*. Riley; *Old Ironsides*, Holmes; *Bannockburn*, Scott.

II. Poems to be Read to the Class for Discussion and Correlation

Correlated with Industrial Arts: *The Mystic Weaver*, Anonymous; *Keramos*, Longfellow; *Fust and His Friends*, Browning; *Hanging of the Crane*, Longfellow; *Song of the Shirt*, Hood; *The Cry of the Children*, Mrs. Browning; *The Weaver's Dream*, Alice Cary; *A Handful of Clay*, Van Dyke.

List of Stories

(To be told or read to the class)

Ben Hur, Lew Wallace (Selected); *The Chariot Race, The Circus. Rip Van Winkle*, Washington Irving; *Ichabod Crane*, Washington Irving; *The Shipwreck, Sardinian Drummer Boy, The Blood of Romagna, From the Appennines to the Andes, From the Heart of a Boy*, by de Amicis. *David and Goliath*, Bible; *Jonathan and David*, Bible; *The Siege*. Scott's Ivanhoe. Christmas Stories: *First Christmas Tree*, Van Dyke; *The Other Wise Man*, Van Dyke; *The Birds' Christmas Carol*, Wiggin; *Ten Short Stories*, Dickens, A. B. Co.; *Red Dog*, Second Jungle Book, Kipling; *The Ship that Found Herself*, The Day's Work, Kipling; *The Cat Who Walked by Himself*, Just So Stories, Kipling; *How the Elephant Got His Trunk*, Just So Stories, Kipling; *Rikki, Tikki, Tavi*, Jungle Book, Kipling; *Billy Beg and His Bull; The Pacing Mustang*, E. Seton Thompson; *Uncle Remus Stories*, (Several to be selected,) Harris; *The Doll's Dressmaker*, Our Mutual Friend, Dickens; *Where Love is There God is Also, Master and Man*, Tolstoi, Everyman's; *Twenty-Three Tales from Tolstoi*, Everyman's, *Norse Myths:*

The following stories have been selected from Stories from Northern Myths by Emilie Kip Baker: *How All Things Began; Odin's Search for Wisdom; Gods and Men; Sif's Golden Hair and the Making of the Hammer; How Thor Went Fishing; Idun's Apples; The Wooing of Gerd; The Stories of Balder; The Story of Siegmund; The Vengeance of the Volsungs; The Magic Sword; The Wooing of Brunhilde; The Death of Siegfried; The Punishment of Loki, The Twilight of the Gods.*

SIXTH GRADE

I. The intermediate and grammar grade period of the child's development.

In each of these nascent periods important physical and mental changes are occurring in the child. During the intermediate period the brain assumes its normal size, the sensation-centers are knitted together, and the nerve-connections increase in number and function. Compared with the preceding period, it is characterized by relatively slow growth, and yet there is an abundance of "excess" energy. The period is formative in the sense that the wandering, involuntary, passive attention tends to give way, under proper guidance, to the definite, active, voluntary attention, and in the sense that moral habits, habits of honor, and those referring to the commoner virtues, as well as habits of study, receive an impetus or trend that likely leads to their fixation.

II. Characteristics of the period.

The child at this time in his life, has great powers of endurance. It is the time for storing reserve energy. Although his conduct and character are variable and in-

constant, they are greatly influenced by pressure. In referring to this period, President Hall says:

Never again will there be such susceptibility to drill and discipline, such plasticity to habituation, or such ready adjustment to new conditions. It is the age of external and mechanical training. Reading, writing, drawing, manual training, musical technique, foreign tongues and their pronunciation, the manipulation of numbers and of geometrical elements, and many kinds of skill, have now their golden hour, and if it passes unimproved, all these can never be acquired later without a heavy handicap of disadvantage and loss. The method should be mechanical, repetitive, authoritative, dogmatic. The automatic powers are now at their very apex, and they can do and bear more than our degenerate pedagogy knows or dreams of.

During the primary grades, imitation and example are prominent; during the intermediate grades, *authority or precept are prominent.* This does not mean that all the material given the child is or must be intrinsically uninteresting. Quite the contrary is true: it ought to be all the more interesting; but unless the child finds it so, he must be required to master enough of the rudiments of the subject to furnish a basis for interest. When he has no will, it must be supplied by his experienced teacher and parent.

III. Aims in training.

As more than three-fourths of all our experiences function as habit, we readily recognize the extreme importance of fully utilizing this period. The mind must be stored with subject-matter, although the memory is not yet highly associative. Whatever impressions are received should be deepened by repetitions. All drill subjects and drill phases of other subjects should be rendered as nearly automatic as possible. The mechanics of reading begun in the preceding grades must now be made habitual. The child must now acquire the dictionary habit, the skills used in articulation and pronunciation, the proper emotional response to the different kinds of reading material; and an abundance of worthy literary selections should be committed.

IV. Physical and spiritual changes.

The physical disturbances occurring during the grammar period and immediately following it are shown in the increase in size and in height. There is an enlargement and functioning of all the organs, an elongation of the vocal cord, increase in the volume of the heart, etc. The whole system is undergoing a change. Nervous centers, glands, voluntary and involuntary muscles—everything is affected. There is an influx of new sensations—the mind fills with hopes, dreams, tempestuous passions, and new ideas. The spirit of independence is germinating, egoism is giving way to altruism, social impulses are becoming dominant, and the reasoning powers are coming into use. The very worst things are liable to happen at this time of greatest of dangers. Ideals are now in the process of formation, and they may be either high or low.

V. Extent and character of reading.

An increased interest in reading is characteristic of this period. The first impulse to greater interest in reading comes at the eighth year; it increases steadily to twelve years, and then takes a rapid rise to fourteen, reaching its height at fifteen. An investigation of books used by boys shows *that they use books of travel, adventure, and biography;* while girls prefer *fiction.* The thirst at this time must be satisfied and parents and teachers can well afford to spend much time and thought upon the selec-

tion of reading material for so important a period. The material selected should present a wholesome phase of life, should be good literature, and should be adapted to the age of development of the children.

The longer and more complex literary master-pieces, given as complete selections, should be used now for study. The time has come when much home study and collateral reading may be required and when children may be permitted and encouraged to read along lines in which they are specially interested.—Briggs and Coffman.

Note: Read carefully, "Suggestions for the teaching of reading and literature in the grammar grades," pp. 59–70.

Text: (Arranged in the order of their difficulty).

The following order of use of basal texts for the grade is meant in no wise to be arbitrary. If a teacher prefers to select for the first reading text in this grade either of the texts listed or a set of books from the office that may be simpler than either of these, she is free to do so. But since Hiawatha presents greater difficulties than either of the other texts it seems advisable that she should not undertake it until the second semester of the year. A wise teacher will "bait" the reading appetite and reading effort of her class by holding out to her pupils as a reward for achievement the reading of some special book as soon as they have made an effort to reach the reading standard for the first half-year's work.

1. Maitland. Heroes of Chivalry.
2. King of the Golden River. Stepping Stones to Literature. Book V.
3. Longfellow. Hiawatha.
4. A set of books to be borrowed from the office.

Sets of Books that may be Borrowed from office, (24 Copies to each set)

King of the Golden River	Ruskin	Ginn & Co.
Stories Every Child Should Know, (Vol. III)	Kipling	Doubleday, Page & Co.
Little Men	Alcott	Little, Brown
Little Women	Alcott	Little, Brown
The Bluebird	Maeterlinck	Silver, Burdett
Men of Old Greece	Hall	Little, Brown
Lisbeth Longfrock	Anrudd	Ginn & Co.
Roof and Meadow	Sharp	Century Co.
Little Lame Prince	Mulock	Harper Bros.
Friday's Child	F.E.Crompton	Dutton Co.

Time Allotment: 50 min. per day.

HOME AND SCHOOL EXTENSION READING

Such a list of books must be varied to meet the needs of the sixth grade pupil who has intellectual tastes beyond his years and also of the child who is interested only in the simpler stories. This list attempts to provide for all ranges of literary appreciation. The teacher is at liberty to discard and substitute.

After a pupil has read one of the books on the Home and School Extension Reading List, he must hand in the following report,

filled out to the teacher's satisfaction. Ten such reports for the year entitle the pupil to extra credits in his English work.

REPORT TO BE HANDED IN

1. Title———Author———Publisher———.
2. Classify the book as:
   novel
   story of adventure
3. Characterize it as:
   humorous
   pathetic
   thrilling
   dry
4. Name the chief characters (not more than five) giving the most prominent characteristics of each.
5. Where is the scene laid, and in what period of time?
6. Relate the incident you liked best, or describe the most vivid scene in the book.
7. Would you recommend the book to other members of the class? Why?

EXTENSION LIST

Pilgrim's Progress, Bunyan, Ginn and Company; *Red Cap Tales*, Crockett, Macmillan Co.; *A Little Book of Profitable Tales*, Field, American Book Co.; *A Boy's King Arthur*, Lanier, Chas. Scribner's Sons; *A Boy's Froissart*, Lanier, Chas. Scribner's Sons; *The Iliad*, Lang, Leaf and Meyer, Macmillan Co.; *Men of Iron*, Pyle & Bros.; *Picciola*, Saintine, Burt's Home Library; *Gulliver's Travels*, Swift, Macmillan Co.; *Two Little Savages*, Seton-Thompson, Chas. Scribner's Sons; *Jungle Book*, Kipling, Century Co.; *Second Jungle Book*, Kipling, Century Co.; *With Spurs of Gold*, Kirk and Greene, Little Brown; *Uncle Remus*, Joel Chandler Harris, Appleton Co.; *The Man Without a Country*, E. E. Hale, Little, Brown; *Hoosier School Boy*, Eggleston, Scribner & Sons; *Hoosier School Master*, Eggleston, Grossett & Dunlap Co.; *Grandfather's Chair*, Hawthorne, Crowell Co.; *Twenty-Three Tales*, Tolstoi, Everyman's Library; *Master and Man*, Tolstoi, Everyman's Library; *Century Historical Readers*, Century Company: *Explorers and Settlers; The Colonists and the Revolution, A New Nation; The Westward Movement; The Civil War; The Progress of a United People; Stories in Stone from the Roman Forum*, Lovell, Macmillan Co.; *The Lays of Ancient Rome*, Macaulay, Ginn & Co.; *Undine*, de la Motte Fouque, Crowell; *Westward Ho.*, Chas. Kingsley, Everyman's Library; *Pioneers of France in the New World*, Francis Parkman, Little, Brown Co.; *Montcalm and Wolfe*, Francis Parkman, Little, Brown Co.; *Penrod*, Tarkington, Doubleday, Page; *Mrs. Wiggs of the Cabbage Patch*, Rice, Century; *Strange Stories of Colonial Days*, Harper Bros.; *Strange Stories of the Revolution*, Harper Bros.; *Strange Stories of 181?*, Harper Bros.; *Panama, Past and Present*, Bishop, Century Co.; *Careers of Danger and Daring*, Moffet, Century Co.; *Peter Pan*, Barrie, Scribner; *The Bluebird*, Maeterlinck, Silver, Burdett & Co.; *The Piper*, Peabody, Houghton, Mifflin Co.; *Stories of the English*, Warren, D. C. Heath Co.; *Courtship of Miles Standish*, Longfellow, Crowell Co.; *Men of Old Greece*, Hall, Little, Brown Co.; *Fanciful Tales*, Stockton, Scribner & Sons; *Little Smoke*, Stoddard.

POETRY

I. POEMS FOR MEMORIZING

(Select one for each month)

NOTE: Upon request, copies of the poems can be secured at the office of the supervisor.

Autumn: Hunting Song, Scott; *Autumn Woods*, Bryant.

Winter: Christmas from Marmion, Introduction to Canto VI, Lines 1-85, Scott.

Spring: April, Emily Dickinson; *Home Thoughts from Abroad*, Browning; *Daffodils*, Wordsworth; *To a Water Fowl*, Bryant; *Song of the Chattahoochee*, Lanier.

Miscellaneous: My Tenants, H. H. Jackson; *Abou Ben Adhem*, Hunt; *Charge of the Light Brigade*, Tennyson; *Lochinvar*, Scott; *Good News from Ghent to Aix*, Browning; *My Lost Youth*, Longfellow.

Patriotic: Boston Hymn, Emerson; *Breathes There a Man*, Scott; *Dear Land of All My Love*, Lanier; *The Peace Pipe*, Hiawatha, Longfellow.

II. POEMS TO BE READ TO THE CLASS AND DISCUSSED IN CONNECTION WITH HISTORY, LITERATURE, ETHICS, GEOGRAPHY, ART

Charlemagne, (Tales of a Wayside Inn), Longfellow; *Angel of Buena Vista*, Whittier; *The Boy and the Angel*, Browning; *The House Beautiful*, Stevenson; *The Legend Beautiful*, Longfellow; *Horatius*, Macaulay; *The Revenge*, Tennyson; *Fidelity*, Wordsworth; *Song of My Life*, Mackay; *In the Doorway*, Browning; *Courtship of Miles Standish* (Selected parts), Longfellow; *Gunga Din*, Kipling; *The Canadian Boat Song*, Moore; *The Angler's Reveille*, Van Dyke. In connection with Maitland's Heroes of Chivalry, read one or more selections from Tennyson's Idylls of the King.

SEVENTH GRADE

I. Physical and spiritual changes in the child's development.

The physical disturbances occurring during the grammar period and immediately following it are shown in the increase in size and in height. There is an enlargement and functioning of all the organs, an elongation of the vocal cord, increase in the volume of the heart, etc. The whole system is undergoing a change. Nervous centers, glands, voluntary and involuntary muscles—everything is affected. There is an influx of new sensations—the mind fills with hopes, dreams, tempestuous passions, and new ideas. The spirit of independence is germinating, egoism is giving way to altruism, social impulses are becoming dominant, and the reasoning powers are coming into use. The very worst things are liable to happen at this time of greatest of dangers. Ideals are now in the process of formation, and they may be either high or low.

II. Extent and character of reading.

An increased interest in reading is characteristic of this period. The first impulse to greater interest in reading comes at the eighth year; it increases steadily to twelve years, and then takes a rapid rise to fourteen, reaching its height at fifteen. An investigation of books used by boys shows *that they use books of travel, adventure, and biography;* while girls prefer *fiction*. The thirst at this time must be satisfied and parents and teachers can well afford to spend much time and thought upon the selection of reading material for so important a period. The material selected should present a wholesome phase of life, should be good literature, and should be adapted to the age of development of the children.

The longer and more complex literary master-pieces, given as complete selections, should be used now for study. The time has come when much home study and collateral reading may be required and when children may be permitted and encouraged to read along lines in which they are specially interested.—(Briggs and Coffman.)

Note: Read carefully "Suggestions for the Teaching of Reading and Literature in the Grammar Grades," pp. 59–70.

Texts:

1. Longfellow. Evangeline.
2. Whittier. Snowbound. (Seasonal.)
3. Stevenson. Treasure Island.
4. Set of books to be borrowed from the office.

Sets of Books that may be Borrowed from the Office (24 Copies to Each Set.)

Strange Stories of the Revolution		Harper Bros.
The Oregon Trail	Parkman	Little Brown

Stories of 1812		Harper Bros.
The Man Without a Country	Hale	Little, Brown
Stories of the Great West	Roosevelt	Century Co.
Strange Stories from English History	Warren	D. C. Heath
Story of the Map of Europe	Benezet	Scott, Foresman Co.
The Spy	Cooper	Crowell
Kidnapped	Stevenson	Scribner's Sons

HOME AND SCHOOL EXTENSION READING

Such a list of books must be varied to meet the needs of the seventh grade child who has intellectual tastes beyond his years and also of the child who is interested only in the simpler stories. This list attempts to provide for all ranges of literary appreciation. The teacher is at liberty to discard and substitute.

After a pupil has read one of the books on the Home and School Extension Reading List, he must hand in the following report, filled out to the teacher's satisfaction. Ten such reports for one year entitle the pupil to extra credits in his English work.

REPORT TO BE HANDED IN

1. Title———Author———Publisher———
2. Classify the book as:
   novel
   story of adventure
3. Characterize it as:
   humorous
   pathetic
   thrilling
   dry
4. Name the chief characters (not more than five), giving the most prominent characteristics of each.
5. Where is the scene laid, and in what period of time?
6. Relate the incident you liked best, or describe the most vivid scene in the book.
7. Would you recommend the book to other members of the class? Why?

EXTENSION LIST

The Day's Work (Selected Stories), Kipling, Doubleday, Page; *The House of the Seven Gables*, Hawthorne, Everyman's Library; *Uarda*, Ebers, Burt; *Alice of Old Vincennes*, Thompson, Grossett & Dunlap; *The Crisis*, Churchill, Grossett & Dunlap; *Hugh Wynne*, Mitchell, Century Co.; *The Reds of the Midi*, Felix Gras, D. Appleton & Co.; *Huckleberry Finn*, Clemens, Harper & Bro.; *Tom Sawyer*, Clemens, Harper & Bro.; *The Last of the Mohicans*, Cooper, Crowell; *The Deerslayer*, Cooper, Crowell; *The Spy*, Cooper, Crowell; *David Copperfield*, Dickens, Dutton; *Oliver Twist*, Dickens, Dutton; *Pickwick Papers*, Dickens, Dutton; *Old Curiosity Shop*, Dickens, Dutton; *Cricket on the Hearth*, Dickens, Dutton; *The Man Without a Country*, Edward Everett Hale, Little, Brown & Co.; *Tom Brown's Schooldays*, Hughes, Macmillan Co.; *Tom Brown at Rugby*, Hughes, Macmillan Co.; *Tom Brown at Oxford*, Hughes, Macmillan Co.; *The Legend of Sleepy Hollow*, Washington Irving, Burt; *Ramona*, Helen Hunt Jackson, Little, Brown & Co.; *The Oregon Trail*, Parkman, Little, Brown & Co.; *Plutarch's Lives*, Plutarch, Ginn & Co.; *Scottish Chiefs*, Porter, Burt; *Thaddeus of Warsaw*, Porter, Burt; *Winning of the West*, Roosevelt, Burt; *Men of Iron*, Pyle, Harper & Bro.; *Pioneers of France in the New World*, Parkman, Little, Brown & Co.; *Montcalm and Wolfe*, Parkman, Little, Brown & Co.; *Kenilworth*, Sir Walter Scott, Ginn & Co.; *Rob Roy*, Sir Walter Scott, Ginn & Co.; *Kidnapped*, Robert Louis Stevenson, Chas. Scribner's Sons; *Gulliver's Travels*, Swift, Macmillan Co.; *Penrod*, Tarkington, Doubleday, Page Co.; *Mrs. Wiggs of the Cabbage*

Patch, Rice, Century Co.; *Story of My Life*, Helen Keller, Doubleday, Page Co.; *Helen's Babies*, Habberton, Caldwell; *Napoleon Bonaparte*, Johnston, Holt & Co.; *How Two Boys Made Their Own Electrical Apparatus*, T. M. St. John, *Twenty-Three Tales*, Tolstoi, Everyman's Library; *Women in the Making of America*, Addington Bruce, Moffatt, Yard; *Panama, Past and Present*, Bishop, Century Co.; *Tales from Shakespeare*, Lamb, Everyman's Library; *Anne of Green Gables*, Montgomery, Page Co.; *Freckles*, Porter, Doubleday, Page; *Ben Hur*, Wallace, Harper; *Egyptian Princess*, Ebers, Crowell; *William Tell*, Schiller, McKay; *Undine*, Fouquet, Crowell; *Cranford*, Gaskell, Crowell; *Queechy*, Warner, Burt; *Kenilworth*, Scott, Everyman's Library; *Guy Mannering*, Scott, Everyman's Library; *The Water Witch*, Scott, Everyman's Library; *The Hoosier Schoolmaster*, Eggleston, Scribner & Sons; *The Hoosier Schoolboy*, Eggleston, Grossett; *Call of the Wild*, London, Macmillan; *Captains Courageous*, Kipling, Century; *The Secret Garden*, F. H. Burnett.

POETRY

I. Poems for Memorizing

Select one for each month

Note: Upon request, copies of these poems can be secured at the office of the supervisor.

Autumn: Autumn Trees, R. W. Gilder; *Tampa Robins*, Lanier.

Winter: The Chambered Nautilus, Holmes; *Christmas from Marmion* (Lines 86–122, Introduction to Canto VI in continuation of the Christmas selection memorized in the 6th grade). *Winter*, (Sir Launfal), Lowell.

Spring: Voice of Spring, Hemans; *Going a Maying*, Herrick; *June*, (Sir Launfal,) Lowell.

Miscellaneous: Annabel Lee, Poe; *Lay of the Last Minstrel* (Selections), Scott; *Rosabel*, Canto 6, Verses 2, 3; *Bugle Song*, Tennyson; *Marmion* (Selections), Scott; *Canto I*, Lines 126-165; *Canto I*, Lines 58-92; *Canto II*, Introduction, Lines 134-145; *Canto III*, Lines 43-79; *Gradatim*, J. G. Holland; *Santa Filomena*, Longfellow.

Patriotic: Building of the Ship (Last 22 lines, beginning Thou too, sail on); *Home Sweet Home*, Paine.

II. Poems to be Read to and Discussed by the Class in Connection with History, Literature, Geography, Ethics, Art

Warren's Address to Soldiers, Pierpont; *Sands O'Dee*, Kingsley; *Pied Piper*, Browning; *Destruction of Sennacherib*, Byron; *Jock O'Hazeldine*, Scott; *Song of Marion's Men*, Bryant; *Ballad of East and West*, Kipling; *Building of the Ship*, (Entire Poem); *A Song of England*, Alfred Noyes; *For a' That*, Burns; *Halloween*, Burns; *Transformation*, Van Dyke; *Herve' Riel*, Browning; *Ahab Mohammed*, J. M. Legare; *One Hoss Shay*, Holmes; *Grandmother's Story of Bunker Hill*, Holmes; *Concord Hymn*, Emerson; *Boston Hymn*, Emerson; *Revenge of Hamish*, Lanier; *John Gilpin's Ride*, Cowper; *The Bells*, Poe; *William Tell*, Schiller (Selected Parts).

EIGHTH GRADE

I. Physical and spiritual changes in the child's development.

The physical disturbances occurring during the grammar period and immediately following it are shown in the increase in size and in height. There is an enlargement and functioning of all the organs, an elongation of the vocal cord, increase in the volume of the heart, etc. The whole system is undergoing a change. Nervous centers, glands, voluntary and involuntary muscles—everything is affected. There is an influx of new sensations—the mind fills with hopes, dreams, tempestuous passions, and new ideas. The spirit of independence is germinating, egoism is giving way to altruism, social impulses are becoming dominant, and the reasoning powers are coming into use. The very worst things are liable to happen at this time of greatest of dangers. Ideals are now in the process of formation, and they may be either high or low.

II. Extent and character of reading.

An increased interest in reading is characteristic of this period. The first impulse to greater interest in reading comes at the eighth year; it increases steadily to twelve

years, and then takes a rapid rise to fourteen, reaching its height at fifteen. An investigation of books used by boys shows *that they use books of travel, adventure, and biography;* while girls prefer *fiction*. The thirst at this time must be satisfied and parents and teachers can well afford to spend much time and thought upon the selection of reading material for so important a period. The material selected should present a wholesome phase of life, should be good literature, and should be adapted to the age of development of the children.

The longer and more complex literary master-pieces, given as complete selections, should be used now for study. The time has come when much home study and collateral reading may be required and when children may be permitted and encouraged to read along lines in which they are specially interested.—(Briggs and Coffman.)

Note: Read carefully "Suggestions for the Teaching of Reading and Literature in the Grammar Grades," pp. 59–70.

Time Allotment: 150 min. per week.

Texts:

1. Scott. Ivanhoe.
2. Shakespeare. As You Like It.
   Merchant of Vedice.
   Iulius Caeser.
   (Study only one drama a year.)
3. Eliot. Silas Marner.
4. Set of books to be borrowed from the office. (See list for Seventh Grade.)

HOME AND SCHOOL EXTENSION READING

Such a list of books must be varied to meet the needs of the eighth grade child who has intellectual tastes beyond his years and also of the child who is interested only in the simpler stories This list attempts to provide for all ranges of literary appreciation. The teacher is at liberty to discard and to substitute.

After a pupil has read one of the books on the Home and School Extension Reading List, he must hand in the following report, filled out to the teacher's satisfaction. Ten such reports for the year will entitle the pupil to extra credits in his English work.

REPORT TO BE HANDED IN

1. Title———Author———Publisher———.
2. Classify the book as:
   novel
   story of adventure
3. Characterize it as:
   humorous
   pathetic
   thrilling
   dry
4. Name the chief characters (not more than five) giving the most prominent characteristics of each.

5. Where is the scene laid, and in what period of time?
6. Relate the incident you liked best, or describe the most vivid scene in the book.
7. Would you recommend the book to other members of the class? Why?

EXTENSION LIST

The Reds of the Midi, Felix Gras, Appleton & Co.; *The Last of the Mohicans*, Cooper, Crowell; *The Deerslayer*, Cooper, Crowell; *The Spy*, Cooper, Crowell; *David Copperfield*, Dickens, Dutton; *Oliver Twist*, Dickens, Dutton; *Pickwick Papers*, Dickens, Dutton; *Old Curiosity Shop*, Dickens, Dutton; *Cricket on the Hearth*, Dickens, Dutton; *Winning of the West*, Roosevelt; *Tom Brown's Schooldays*, Hughes, Macmillan Co.; *Tom Brown at Rugby*, Hughes, Macmillan Co.; *Tom Brown at Oxford*, Hughes, Macmillan Co.; *The Legend of Sleepy Hollow*, Irving, Washington, Burt; *Thaddeus of Warsaw*, Porter, Burt; *Ramona*, Helen Hunt Jackson, Little, Brown & Co.; *The Oregon Trail*, Parkman, Little, Brown & Co.; *Scottish Chiefs*, Porter, Burt; *Kenilworth*, Scott, Sir Walter, Ginn & Co.; *Rob Roy*, Scott, Sir Walter, Ginn & Co.; *Story of My Life*, Keller, Helen, Doubleday, Page; *Helen's Babies*, Habberton, John Caldwell; *Napoleon Boneparte*, Johnston, Holt; *The Day's Work*, Kipling, Doubleday, Page; *Twenty Three Tales*, Tolstoi, Everyman's Library; *Uarda*, Ebers, Burt; *A Tale of Two Cities*, Dickens, Burt; *The Jessamy Bride*, Moore, Frankfort, Grossett; *Personal Recollections of Joan of Arc*, Twain, Mark, Harper; *Women in the Making of America*, Addington Bruce, Moffat, Yard; *The House of the Seven Gables*, Hawthorne, Burt; *The Marble Faun*, Hawthorne, Burt; *The Madness of Philip*, Josephine Dodge Daskam, Doubleday, Page; *Emmy Lou*, Mason, Grossett; *The Story of Tonty*, Catherwood, McClurg; *Mistress Brent*, Thurston, Little, Brown; *Huckleberry Finn*, Twain, Mark, Harper; *Tom Sawyer*, Twain, Mark, Harper; *Pilgrim's Progress*, Bunyan, Burt; *Red Cap Tales*, Crockett, Macmillan; *The Gold Bug*, Poe, Burt; *The Story of Ab*, Waterloo, Doubleday, Page & Co.

POETRY AND PROSE FOR MEMORIZING

I. POEMS AND PROSE FOR MEMORIZING (Choose one selection for each month):

NOTE: Upon request copies of these selections can be secured at the office of the supervisor.

Autumn: To Autumn, Keats; *Autumn*, Hood.

Winter: Christmas Sermon, Stevenson; *Barnacles*, (A New Year's Poem,) Lanier; *Death of Old Year*, Tennyson.

Spring: Mocking Bird, Whittier; *Marshes of Glynn*, Lanier; *Rhodora*, Emerson.

Miscellaneous: Laugh and be Merry, John Masefield; *There was a Boy*, Wordsworth; *Hope Springs Eternal*, Pope; *Lady Claire*, Tennyson; *Longing*, Lowell; *The Courtin*, Lowell; *King Cophetua and the Beggar Maid*, Tennyson; *The Days that are Gone*, Mackay; *Sir Galahad*, Tennyson; *Ballad of Trees and the Master*, Lanier; *Annabel Lee*, Poe; *Sermon of Sir Francis*, Longfellow; *Apostrophe to the Ocean*, Byron; *For a' That*, Burns; *The Heritage*, Lowell; *My Trust*, Whittier; *Crossing the Bar*, Tennyson; *Telling the Bees*, Whittier.

Patriotic: Captain, My Captain, Whitman; *Vitäi Lampada*, Newbolt; *The Flower of Liberty*, Holmes; *Love of Country*, Montgomery.

Prose Selections (Selected parts): *Lincoln's Gettysburg Address; Birthday of Washington*, Rufus Choate; *Webster's Speech on Secession; Hayne's Reply to Webster; Utility of the Beautiful*, Ruskin; *My Symphony*, Channing; *Peace Congress of the Union*, Edward Everett; *Nobility of Labor*, Orville Dewey; *Resistance of British Aggression*, Patrick Henry; *Footpath to Peace*, Van Dyke; *Eldorado*, Stevenson; *Christmas Sermon*, Stevenson.

II. POEMS TO BE READ AND DISCUSSED BY THE CLASS IN CONNECTION WITH HISTORY, LITERATURE, GEOGRAPHY, ETHICS, ART:—

Ballad of East and West, Kipling; *The Raven*, Poe; *Skeleton in Armor*, Longfellow; *Lotus Eaters*, Tennyson; *To a Highland Girl*, Wordsworth; *Sohrab and Rustum*, Arnold; *Cotter's Saturday Night*, Burns; *Rhoecus*, Lowell; *The Forsaken Merman*, Arnold; *Hohenlinden*, Campbell; *Gertrude of Wyoming*, Campbell; *Lord Ullin's Daughter*, Campbell; *The Heathen Chinee*, Bret Harte; *Forty Singing Seamen*, Noyes; *Lyrics from The Princess*, Tennyson:—*Sweet and Low, Blow Bugle, O Swallow, Swallow, Flying South, Home They Brought Her Warrior Dead.*

COMPOSITION: PRIMARY GRADES*

It is desirable to acquire skill in the ability to express ideas adequately in effective words and the chief agency in securing such mastery is the school. The work in social relations, in nature, and literature furnish opportunity for the acquisition of an abundance of ideas, and the most effective tool for their transference is the mother tongue aided by the various expressive activities, drawing, music, rhythmic plays, and games. "All effort toward expression is, in a broad sense, composition. Hence the term includes the fragmentary and informal expressions heard throughout a school-day, as well as the more complete treatment of a topic. Oral composition deserves more attention than written and should be measured by standards equally high. Neither oral nor written language should lag behind the child's needs and at all times should contribute to his intellectual growth."

The aims:

1. It is of first importance . . . "to make the free expression of ideas a *pleasure* to the children," since self-expression through some form of activity is the natural outlet of energy.

2. Intelligent work depends upon the clear understanding of the intimate relationship of language and ideas. Recognition of the *thought process* demands development of ideas and orderly habits of thinking; recognition of the *language process* demands that ease, accuracy, adequacy of expression shall be secured through the correct and effective use of the mother tongue.

3. Training in the habit of thinking is important.

"The habit of thinking is worth a thousand thoughts." The little child's halting, stumbling speech occurs often because he does not yet know how to handle the tools by which to make himself understood. It may also be because the thought has not been clearly comprehended. Sometimes the attempt to express the idea helps to clear up the muddy thinking that lies behind it, therefore, two distinct facts are to be kept in mind: (1) that clear thinking is an aid to

*Considerable material and many of the ideas in this section have been drawn from *The Elementary Course in English* by Professor James Fleming Hosic, Head of the Department of English, Chicago Normal College. Unless otherwise indicated, all quoted material in the outline for Grades I to IV has been taken from Professor Hosic's *Course*.

definite expression, and (2) that attempts at expression tend to clear thinking. One aids and abets the other.

4. It is essential that "aid be given to the child by which to overcome his special faults." The child must have a vocabulary sufficiently large to meet the ordinary demands; to speak correctly he must be trained not only in grammatical usage, but to recognize the finer distinctions which literature unconsciously conveys.

Certain principles contributing to successful attainment of results should be clearly defined:

1. "Language development is specific, and individual, and exercises should arise out of typical and natural situations in answer to a felt need" recognized by the children as worth while. Making rational use of the instincts of imagination, curiosity, competition, and collection, the work of the primary grades can, for the most part, be kept joyous, spontaneous and sincere, all elements necessary to success.

2. "Language is learned largely by unconscious imitation." The child absorbs from all about him—his home, his classmates, his books. "The strongest school influence is that of the group to which the child belongs. The teacher's task is largely concerned in helping the children to train each other." The teacher sets the ideal of correct expression through her own use of English, through corrections of errors, through literature which aids in lifting language above the colloquial level.

3. "What you think it is necessary for children to do, settle in them by indispensable practice." Practice in correct usage is the only means by which correct habits are formed. "Habits of order and construction are gained largely by the teacher's presentation, questions, and directions."

4. "The use of good English is a habit," and is secured only by intelligent, eager, long-continued practice under guidance and criticism. "The combined influence of the home and community often exceeds that of the school" and is often detrimental to growth. Poor English habits established at an early age can be overcome only by persistent effort in establishing right reactions within simple limits, and creating a desire to attain a worthy ideal.

5. "Language is made up of forms," and some study of form in relation to the thought expressed is educative. Facts and principles of composition should be taught through use and when they are needed for use. There should be simple discussion when need arises, but no explicit statement should be expected earlier than the fourth year. But this is no valid excuse for the lack of thor-

oughness, and knowledge once gained should never be allowed to fall into disuse.

6. Sincerity in work is essential. Originality springs from first-hand observations and the free play of imagination. Three points are worthy of consideration: first, truthfulness; second, correctness; third, artistic form.

7. Motives for expression should be provided, for children are interested in self-expression tending to intellectual growth only when the purpose for its creation seems adequate. In the primary grades these may be included under two heads:

(a) a desire to give pleasure and profit to others;

(b) the pleasure which creation for its own sake brings.

8. More perhaps than in any other subject, training in English is dependent upon the whole life and atmosphere of the school, upon clearly recognizing the fact that every exercise is an exercise in English; dependent, too, upon the teacher's personality, upon her sympathetic understanding of child-nature, upon her full realization of the fact that imitation and habit are of prime importance and that every hour of school life modifies the ideals of spoken and written English of children.

The means to be used may be designated as follows:

Sources of material:

(1) Children's experiences, at home and at school, because of real and absorbing interest to them;

(2) These experiences supplemented by the observations and experiences of others recorded in books,

(3) Stories and poems in literature.

(4) Events in history and geography, selection and treatment being determined by the age and interests of children.

(5) Pictures.

Expression:

(1) Conversations.

(2) Story Telling.

(3) Memorizing of poems.

(4) Dramatizations.

(5) The recitation, including the summaries of lessons.

(6) Original compositions.

Technique:

As children talk or write criticism of oral and written language is given to the individual and to the group; drill in the correction of

errors through the medium of games, and simple exercises closely related to the difficulty discovered in individual compositions. Punctuation, spelling and other elements of technique emphasized according to the children's capacity to comprehend their use.

Spoken English:

For the reason that we make use of the mother tongue in speech more than in writing and because an individual's degree of education and culture is judged by his speech more often than in any other way it is essential that spoken English in oral composition be emphasized. In the following the values, the means and some resulting habits are reiterated in order to impress its significance in primary grades.

ORAL COMPOSITION

Oral English has come into the schools and is there to stay. Primary teachers have long since recognized the possibilities of oral work now predominant in daily practice through the medium of the story, poem, conversations and dramatizations. Gradually the work has crept into all grades of the elementary school and into the high schools with the result that there is an increasing respect and dignity added to our efforts. However, oral composition, or *oral composing*, has not yet been taken seriously enough, even by those who accept it in theory. Our practice has been to make use of oral work much as a hasty, ill-prepared, short-cut step to written work, which has always seemed more important, because more tangible.

Oral composition has many recognized values. It conduces to clear thinking and fluency of speech. It necessitates an increase in the vocabulary, and gives the individual confidence in his ability to make his thoughts known. It is the common medium of expression in practical use in everyday life, in social and business intercourse. None of us leads a Robinson Crusoe existence. And have we not heard again and again that social and business success depends upon one's ability to talk well? Who has not envied the person who has the gift to express himself well at a moment's notice? To talk well on one's feet is no idle accomplishment. Written English is applied by most of us in the occasional letter, whereas we speak a hundred times for every time we write. Oral English is a constant. Therefore, systematic, intelligent, persistent means should be used to train children in good oral English habits.

Specifically our aim is to train children to talk correctly, fluently and agreeably. The child learns to talk correctly by talking correctly under careful direction, as he learns to read by reading, to

walk by walking, and to write by writing. The school is the laboratory in which experiments are made and while often the good work of the laboratory is checked by undue influences from the outside it is effective in establishing workable ideals through practice rather than precept. Children talk when they have something to say, something to communicate to others that seems to them worth while, when the social situation is maintained; in short: something to say, a motive for saying it, and some interested listener. The school of today provides many and varied activities by which to satisfy this innate desire for expression.

Story Telling:

Story telling, that world-old method of communicating ideas, is the bridge by which we climb to heaven. Ideas are provided; an adequate vocabulary; a plan or sequence; atmosphere; imitation of the teacher's manner; all are absorbed and reproduced in the re-telling. Stories told in parts and in complete wholes; stories modified by additional scenes or different endings, play an important part in training in good habits of oral composition. Ideals are thus given upon which to build the original or independent composition.

Memorizing:

The memorizing of poems and of good prose is also of great value in acquiring vocabulary and style. Selections should be recited, sung, and made the subject of conversation. Some knowledge will be gained, but especially will it develop and refine the vocabulary, and, further, develop taste. Sir Walter Scott wrote, "Children derive impulses of a powerful kind from hearing things that they cannot entirely comprehend." And Dr. Hinsdale, "Beautiful poems suited to the periods of growth and experience will be a perennial wellspring of cultivation and delight."

But, you will say, this is not oral composition. No, a *means* to that end, in giving ideals, establishing habits to be of service in the more definite work of oral composing. Two other specific avenues used by the school may be termed Conversations, and the Recitations.

Conversations:

Class room conversations are based upon the varying interests of children; observations of life about them, experiences, personal and otherwise, which, in terms of the school curriculum, may be geography, history, nature, industrial arts or literature. These may be tales of pets, playthings, incidents, narratives; real and imaginative.

With very little children, this may result in a single, complete sentence, in response to a teacher's question, gradually increasing to two, three, five simple, coherent sentences and representing a sequence of thought. The first duty is to take the child where he is, to make use of his interest, and to encourage him to express these interests. These interests may be enlarged by increasing the experience through observation, and through reading and literature. Enthusiasm on the part of the teacher communicates the same spirit to the children.

Time should not be wasted upon aimless, haphazard talk. The channels of conversation should even with little children be determined or guided by the teacher, but the stream of thought should flow unimpeded by too much criticism. The child should be free and spontaneous and hearty. Language is an art, and it blossoms like other arts, only in the right atmosphere, and under the right stimulus. The wise teacher guards against too much repression, neither does she permit freedom to degenerate into slovenly expression, indistinct utterance and uninteresting detail. There is attempt at organization through a definite plan, worked out by both teacher and children.

The theme, if it can be called by so dignified a name, should have some pith or point, and it should have a beginning, middle and end. Even younger children can come to have some respect for the way a story is introduced, by the sequence of events, and its climax, or close; gradually, a feeling is developed for the appropriate word and the simple, direct, appropriate expression.

Some such plan as follows is in the mind of every teacher who holds the oral composition in respect equal with the written:

1. Get the pupils to talk freely while standing, before making any attempt at correct or formal instruction. This may be termed "Free play."
2. Teach the pupils how to introduce a story properly: by giving in the opening sentence some hint of the time, place, persons or characters, or the plot.
3. Teach the pupils the use of time order.
4. Teach the pupils to close their stories with strong sentences.
5. Train the pupils to *hear;* and to make *helpful* criticism.

The class story and record by the teacher:

The first oral compositions are class efforts, each contributing to the whole, just as is done in preparation for the written class composite work. An oral summary of the whole unit is then made by two or more children, and a record is made by the teacher as the child talks, which is used in various ways; as a basis for discussion of good

points and eradication of errors, in structure, choice of words, and artistic rendering; later, as reading lessons.

The Recitation:

The recitation is the opportunity to test the results of our instruction in habits of orderly thinking, and the gain in ease and fluency. With smaller children, there cannot be what is termed a topical recitation, but as the points are made by different members of the class, in response to the teacher's questions, these points, just as in the oral class composite upon any other subject, should be summarized by one or more members of the class, so that the complete unit of thought stands out clearly in the minds of the hearers. A clear concept in the teacher's mind eventually develops the same clarity in the children's minds. It is needless to add that oral composition should precede all written work, but it is necessary to say that every recitation is an opportunity for *oral composition.*

Criticism and Corrections:

When once a child has something to say, with the motive sufficiently strong to impel its expression and sufficient self-confidence has been established, criticism of oral composition may be made judiciously by the teacher as the child talks, and if the right relation of courteous helpfulness exists, the child accepts the correction, inserts it, and proceeds without interruption to the flow of thought. If she cannot well make the correction as the child talks, then at the first favorable opportunity, the point should be raised. Timid, shrinking children need special care. Gifted children of the motor type need the teacher less, though it is usually this type of child who tells the stories and creates the oral composition.

It is essential that pupils be told how to get rid of mistakes: *by drill upon the correct forms.* With younger children, this means exercises set by the teacher; with older children, the keeping of a note book of "Mistakes and Corrections." Progress can be accurately judged from year to year by comparing one year's list of mistakes with those of the year following. Decrease in errors should become a source of conscious pride. Mastery of technique will come through persistent and concerted effort throughout the school years.

Children need to be trained to hear niceties of speech, and to learn, through the teacher's oral compositions, through reading the best class and individual productions, to be satisfied or annoyed by the way a story is presented. This is most clearly defined in the dramatic

effort. Thorndike states that we make too little of the feeling of satisfaction or annoyance in education.

Habits:

"Thought is deeper than all speech." Train children in the *habit* of thinking and expression is inevitable.

In written work we are able to present comforting evidences of something accomplished, the children producing work that shows a kind of progress. Oral work being so intangible and unmeasurable goes for little; but the crux of the whole matter lies here: as are a child's *habits* of oral expression, so will his habits of written expression tend to become.

The school is then a habit factory. By the constant and sensible use of the various avenues for expression the habits of poise, social courtesy, niceties of speech, and agreeable voice quality are instilled. Naturalness, freedom, grace, and ease are attained as follows:

Poise:

Insist that each child shall stand erect, in natural position, using dramatic or graphic expression, if necessary to make the point more effective.

Social Courtesy:

Face the class audience for whom the contribution is intended. The inspiration of an audience is essential to success, and a good listener is important.

Speech Control:

George H. Palmer says: "Look well to your speech." An audience is interested when it can hear, so habits of clear, distinct enunciation of tone utterance need to be persistently insisted upon. Flexibility is secured through creative imagination.

Thurber says: "The chief defect lies in the voice. I find that students have better control of their pens than they do of the voice. In the timbre of the voice they all need training, especially in articulation. Whatever else seems beyond the resources of pedagogic art, articulation, pronunciation, enunciation, these phases of speech control, are amenable to discipline."

With young children, what can be done? Aside from specific work to secure speech control, dramatization is the most adequate means by which to bring about desired results. When one becomes a Father Bear, the voice must express bear characteristics; when one becomes a king, one takes on kingly airs, and the responsibility felt toward that listening audience is keenly felt by all participants, and

necessity compels the functioning of the things we seek to establish. Self-consciousnes, too, becomes a minor quantity when one is imbued with the spirit of the "make believe world," and slovenly speech is counteracted, if not always cured.

In all this work in oral composition there is great need to guard against discouragement. Bad habits of English will persist after the most careful and painstaking efforts, and often when the more striking defects have been eradicated, the results are felt to be commonplace and the phrasings stilted. As a compensation to our efforts, contrast should be made with the language habits of the schoolroom, and those used in unrestrained conversation to find that at least there is an established ideal. This is, indeed, a wonderful gift of the schools, and in time, there will be a marked advance toward the realization of this ideal when all the teachers from lowest to highest grades realize that every recitation in a measure becomes a recitation in oral composition.

REFERENCES: Chubb, *The Teaching of English;* Spaulding and Bryce, *The Aldine Language Book;* Brooks, *A Manual of Language for Teachers;* Gesell, *The Normal Child and Primary Education;* Spaulding, *The Problem of Elementary Composition;* Bryant, *How to Tell Stories to Children;* Keyes, *Stories and Story Telling;* Hayward, *Lessons for Appreciation.*

FIRST GRADE

The little child meets the school more than half way. He hears and he speaks. He is equipped with a vocabulary and a manner of expressing ideas gained largely through imitation of the elders in the home. The imaginative and imitative instincts are dominant at this period so the best models of good English are placed before him for conscious and unconscious imitation. The more formal expression in stories, songs, rhymes, and dramatizations are all excellent work in training children in the correct use of the mother tongue. Not all the stories told by the teacher, not all the poems recited by the teacher are reproduced, but all are means by which to enrich and enlarge life.

The free and spontaneous expression in the conversations about home and school activities, including games and nature, link the language effort with the work in reading, literature, and all the school subjects. At all times the teacher should respect and direct the halting efforts of the little child in these attempts at oral composition.

Much stress is placed on oral work. Habits of talking clearly, distinctly, correctly and well should be cultivated with much persistence. In addition to the re-telling of stories, the children are encouraged to talk freely about the things in and out of school that interest them.

They bring their pets, and tell their classmates how to take care of them. They bring pictures and relate stories which the picture suggests. They bring their Christmas toys and tell what fun they have with them. They tell of visits to the park, the country, and to other places of interest. Some attention is given to orderly arrangement and sequence of thought until the habit of orderly thinking has been secured. Oral composition is as significant in value as written and paves the way for the latter.

Written work is begun about the middle of the year, for which the copying of simple sentences, the making of sentences with letter cards, and the work in reading and phonic spelling is a definite preparation. In this grade and in the second much of the work may be termed class or cooperative work.

Toward the end of the year some independent work should be done and occasionally a bit of dictation of simple sentences chosen from reading lessons.

Time allotment: Recitation: 15 minutes per day. 75 minutes per week.

I. Oral Composition

1. *Conversation*:

a. The subject is presented by the teacher but the method of procedure should be conversation *with* the children not *to* them.

b. Each contributes his bit of experience under the guidance of the teacher who aids in making the thought clear and coherent.

c. The child is led to think by skillful questioning using the form most adaptable to the subject matter. Personification, drama or dialogue, narrative, verse, each has its place and if freely used in a simple way during the oral lessons will be adapted by the child when needed.

d. The oral composition, at first a class composition, gives the child some confidence in his own powers to organize his mental store under the stimulus of the teacher. As the child grows in ideas through experience, his oral composition grows in content and structure and furnishes a basis for future written work.

e. Simple outlines made under the guidance of the teacher's skillful questions, will train the child to think in an orderly and logical manner.

f. Teacher should frequently record the oral composition of the children; the best being used for blackboard reading lessons.

2. *Story-telling*:

a. Very short, simple stories told by the teacher should be reproduced by the children in answer to the teacher's questions; in

parts; and in wholes. The best of these should frequently be used as stories for reading lessons.

b. Dramatization of nursery rhymes and stories gives vitality to expression.

c. Use the dramatized parts as a basis for language through "What I Was," "What We Did."

d. The oral composition in reproduction is strengthened by the ideals of language incorporated in the story, as well as by the teacher's own use of English. As much correction as can take place without serious interruption of the child's flow of thought should be given.

e. Records of the oral composition of the child should be made by the teacher at frequent intervals, the best being used for blackboard reading lessons.

3. *Memorizing*:

a. Poems; a part or the whole of very simple poems for purposes of better speech control.

b. Story of poem told in a very simple way.

4. *Pictures*:

a. Choose pictures which illustrate a part or the whole of a known story or poem.

b. Original stories suggested by the picture told in very simple way.

II. Written Composition

Not much written composition is attempted until the middle of the year, but from the beginning the child uses simple written work as a medium of expression under the teacher's guidance until some familiarity with the tools has been gained. At first word cards should be used, and later, interchangeably with written work.

1. *Preparatory work*:

a. Illustrative work at blackboard and seats.

b. Children's names; later, the grade, date, school.

c. Words—phonetic and sight; illustrations used freely.

d. Copying a sentence, or sentences. Illustrations used freely.

e. Elliptical sentences from reading lessons; blackboard language reading, and occasionally from the book.

2. *Class story; co-operative and individual work*:

a. Blackboard reading lesson.

b. Record of the oral class composition.

c. Copying part or whole, aiming thus to avoid bad habits of spelling and punctuation by fixing right habits.

d. Independent sentences—word cards.

III. Technical Work

While these lessons are called formal language lessons, they should be as informal as may be; the necessary corrections and drills should be kept within the channels of spontaneous activity. Much can be given through the medium of games. (Detailed suggestions will be given in a later revision of this section.)

IV. Common Errors of Speech

Many errors occur and while some attention is given to the most flagrant at all times it is believed that special instruction and drill upon certain errors in the grades to which they are assigned, provided these are ones most common to the class, will result in weeding them out.

There can be no fixed standard for written composition in the first grade. Because of the difficulties that are presented by the manipulation of paper and pencil and the points of technique, the little child should not be required until the latter part of the first year to attempt to put his thoughts into writing, although through the entire year great stress should be laid upon oral composition.

As this reprint of the Course of Study goes to press it seems only fair to ourselves to state that for a year the teachers of all grades in the County have been reorganizing the work in composition by an intensive study through committees of inventories, minimum essentials, and new standards for promotion, and a wider use of the project. The results of the work of these committees will not be ready for publication until 1919.

SECOND GRADE

Children should talk and write under an impulse to say something in response to a well-defined need. There are two sources from which material is gleaned; directly, from actual experience with observation of life about us, and indirectly, from experiences and observations recorded in books. The work of the first grade is continued and expanded, by giving much attention to oral composition, though some individual written composition is the natural outgrowth of the class or co-operative work. Topics are chosen in which children are interested and about which they have an abundance to say; and

sufficient preparation is given to develop confidence and skill in effective expression.

Much of the work should be done at the blackboard under the direct supervision of the teacher, but the subjects of study make some demand for writing on paper, such as records of experiences, stories, letters and invitations. As an aid, dictionaries will be made of the much needed words, and by the end of the year a writing vocabulary of three hundred fifty words should be gained. Correctness in oral language will be stressed by the use of devices, emphasizing correct forms by appeals to both ear and eye. A few technical phases will be impressed through simple dictation, enough drill being given to make certain that they reach the habit stage.

Time allotment: Recitation: 15 minutes per day; 75 minutes per week. Seatwork: 15 minutes per day under supervision. Total: 150 minutes per week.

I. Oral Composition

1. *Conversation.*

a. Secure spontaneity by encouraging children to talk freely about the things in and out of school that interest them; their pets; their plays; their toys; their visits and other happenings.

b. Limit the subject to a specific problem, but retain originality.

c. Stimulate thought and under its impulse the child will choose the form most convenient for his purpose. Personification, drama or dialogue, narration, verse, should be used freely in the oral class composite and will be adopted by the individual when need arises.

d. Have simple outlines, made by children, under teacher's guidance, and skillful questioning, to give some training in orderly arrangement and sequence.

e. Records should be made by the teacher of the best oral compositions.

2. *Story-telling.*

a. Stories; short, simple, for reproduction in parts and in wholes. Secure good re-telling by dramatization.

b. Use the dramatized parts as a basis for language through "How We Played the Story," or "What We Played Today."

c. Modify reproduction of stories by varying the form of the original, as, by dialogue, or additional scenes, or different endings.

3. *Memorizing.*

a. Poems; by which to increase and refine the vocabulary and to stimulate creative imagination; and as a means to gain better

speech control, evidenced in the improvement of voice quality, in clearness, and expression.

b. Story of poem told.

4. *Pictures.*

a. Choose pictures which illustrate a known story or poem.

b. Original stories suggested by the picture.

II. Written Composition

The child is encouraged to express his own thought in response to a need. The record of it then seems to him valuable; as, a letter to a sick classmate, an invitation, a record of plant growth, a booklet of stories for his own personal use, or to give to another. There is joy also in the accumulation of power expressed in written work. Furnish a motive for records that make them seem worth while to the child.

The material is the natural outgrowth of conversations about interesting things, as, nature, social activities, games, toys, handwork, excursions, reproductions of simple stories, original stories based on pictures.

1. *Class or co-operative work.*

a. All members contribute to the *oral* composition which grows into a coherent whole under teacher's logical questioning, or simple outline. The best contributions are accepted and recorded upon the blackboard, read and revised after suggestions from the class, then copied by the children in part or as a whole if a good reason can be given for doing so. Discussion of technique should take place, as, paragraph form, periods, and copying may tend to fix the correct habits desired. Illustrations should be freely used by both teacher and children.

2. *Individual or independent work.*

a. Careful oral preparation.

b. Eradication of word and technical difficulties through class story, through word, phrase, and sentence drills. The needed words are incorporated in the spelling or word study periods which should precede written work.

c. Blackboard work, whenever possible, under the direct supervision of the teacher who helps with the new or unusual words, prevents grammatical errors, makes suggestions to improve structure and form; in short, she makes success possible to each child by the encouragement which she gives. The purpose should be

to keep the work joyous, spontaneous through the motive defined, coupled with the teacher's genuine enthusiasm.

d. Class criticism of work; positive and negative.

e. One individual composition under the direct supervision of the teacher and one written independently as seat work after careful preparation may be considered enough required work for the week.

3. *Dictation.*

a. A short paragraph involving no points of technique save the capital and period or question mark.

b. Present the sentence or paragraph in perfect form upon the board; discuss the technical points through showing and telling, riddles, and other games. Erase after two or three days. Write from dictation. Do not hurry with this work. Leave until the second half year if children are not ready.

c. Class criticism of work done at blackboard.

NOTE: Independent written work should not be attempted until the teacher feels that his class shows, through the oral work, sufficient strength in organization of thought.

III. TECHNICAL WORK

While the lessons emphazising technique are called formal lessons, they should be as informal as may be; the necessary corrections and drills should be kept within the channels of spontaneous activity by means of games at the end of the reading lessons, the beginning of language lessons, and at rest periods. Most of the drill and teaching for punctuation is done in connection with the dictation exercises. (Detailed suggestions will be given in a later revision of this course.)

IV. APPLICATION OF TECHNIQUE

The medium through which much of this work will be presented is the oral and written class or co-operative compositions, the simple dictation exercises, and the reading seatwork.

1. Oral Composition. Train the children to hear.
2. Written composition. Train the children to see.
3. Reading seatwork. See Reading Seatwork for Grades I and II. Train the children to execute.

V. STANDARDS FOR PROMOTION

Children should acquire during the Second School Year the *habit* of looking over written work carefully to discover and correct mistakes before handing it to the teacher. Work should show careful margins and correct spacing. Careless work cannot be accepted.

As this reprint of the Course of Study goes to press it seems only fair to ourselves to state that for a year the teachers of all the grades in the County have been reorganizing the work in composition by an intensive study through committees of inventories, minimum essentials, and new standards for promotion, and a wider use of the project. The results of the work of these committees will not be ready for publication until 1919.

THIRD GRADE

The language work follows the same general lines as in the preceding year, emphasis being placed upon oral composition rather than written, though the latter will not be neglected since there is a gradually increasing need for some permanent record. The class story or co-operative work will be continued and the individual written work will receive such careful oral preparation that there will be no excuse for technical errors. Children learn to write by writing, and correct habits are fixed by repetitions of correct forms under the stimulus of interest. Motive for written work as well as for oral should be amply provided in this grade. Records of work in history, in geography, of nature observations and experiences, letters, stories retold in dramatic form, original stories from pictures, original verse, both class and individual products, should be made, but always in response to some real need.

Criticism of oral composition should be made without serious interference with the natural flow of thought. Members of the class should be given an opportunity to suggest better arrangement and form of sentences, aid being given by the teacher's record of the composition for this purpose. Helpful criticism of both oral and written work should be encouraged. The definite aim of criticism is to train the pupil's ear to be sensitive to niceties of speech, and to train his eye to view his own writing with care, preventing errors and correcting slips of speech and pen. The teacher should establish a correct viewpoint for herself and help the children to overcome difficulties by constant watchfulness upon a few things; correct spelling of words common to the speaking and writing vocabulary, the correct use of simple punctuation marks, and clear, simple, direct sentence structure. Much of this is presented in correct form in the class story or co-operative work, and in the dictation. But even this is not enough to establish habits which will carry over into the individual or independent work, because the child is concerned with both content and form. The subject should be limited to some specific problem calling for vivid and full detail such as the third grade child can give.

There should be as much attention given to the means—necessary words, phrases, even sentence forms as the children seem to require to make success possible. There should be a first writing under the impulse of interest and desire to express oneself. This first draft written work should then be read and corrected by the children, as far as they are able. It should then be corrected by the teacher and copied by the children, this time giving care to penmanship, spelling and punctuation. Fewer long compositions will be written during the year, but this plan, carefully administered, together with the presentation of technical work through simple dictation, will make certain that a few correct English habits are established.

Time allotment: 30 minutes per day, 150 minutes per week.

I. Oral Composition

1. *Conversation.*

a. Secure spontaneity by encouraging children to have ideas and providing a motive for their expression. They are interested in: *narration* of experiences; *descriptions* of dramatic or other games, or objects of nature study, of handwork, the product and the process of the work; of pictures; *summaries* of lessons.

b. Limit the subject to a specific problem commensurate with the child's power, and retain originality in treatment.

c. Stimulate thought and under its impulse the child will choose the form most convenient for his purpose. Personification, drama or dialogue, narration, verse, should be used freely in the oral class summary and will be adopted by the individual when need arises.

d. Skillful questioning, and simple outlines, made by children, under the teacher's guidance will give some training in orderly arrangement and sequence.

e. Records should be made weekly by the teacher of the best oral compositions, the summary of co-operative work, as well as the individual effort.

f. The test of the directed work is to be found in the daily recitation in the various subjects and the pupil's effort to say clearly and exactly what he observes, thinks, or knows should be regarded as oral composition and guided accordingly. The conversational attitude is maintained by a social situation.

2. *Story-telling.*

a. Stories, short, simple, for reproduction in parts and in wholes. Secure good re-telling by dramatization.

b. Use the dramatized parts as a basis for description.

c. Modify reproduction of stories by varying the form of the original, as by dialogue, or additional scenes, or different endings.

d. Original stories in imitation of well-known fables, rhymes, and fairy tales. Pictures, nature, plays, and work will readily provide suggestive interests. The teacher's chief business is to lead the children to realize their experience and to cast it into purposeful and well-planned expression.

3. *Memorizing.*

a. Poems and a few prose selections, by which to gain an increase and refinement of vocabulary, ideas of clearness, logical arrangement and elegance of expression.

b. Better speech control; articulation, enunciation; good voice quality.

c. Story of poems *told* by children; changed to *dramatic* form.

4. *Pictures.*

a. Choose pictures which illustrate or suggest well-known stories and poems; stories re-told, poems recited; then modified by children.

b. Original stories suggested by the picture, thus teaching children to read a story in a picture.

II. Written Composition

This work will involve the paragraph as a unit of expression. The form and the use has already become familiar through the class story of the preceding grades and the reading material. The oral composition has helped to emphasize how to think out a subject in parts, and how to place the parts in a definite order. The written work or record of this spontaneous expression should come in response to a felt need which to the children seems valuable. The *need for communication* may take the form of a letter to a sick classmate, a business letter, as asking for seeds, an invitation to a class play. The wish to *share* involves exchange of letters between classes and schools giving information, writing personal experiences, making original stories, and dramas for enjoyment. The *desire for preservation* leads to records of history, geography, and nature facts, of poems and original stories in class and individual booklets.

1. *Class, or co-operative work:*

a. The work will be continued upon the same lines as in the preceding grade, viz. the oral composition growing into a coherent whole under the teacher's guidance of logical questioning or simple outline. Exercising the children's judgment, choice is made of the

best contributions which are recorded upon the blackboard for further criticism and suggestion. This furnishes an ideal worthy of respect and is copied to fix correct habits. It may be used as an ideal which the children imitate. Some discussion of technique should take place, as paragraph form, use of periods, capitals, and commas. Illustrations of the text, using sketches and picture prints, should be encouraged.

2. *Individual work:*

a. Careful oral preparation, including the clearly defined motive for a record.

b. Eradication of word and technical difficulties through the class story, through simple dictation, through word, phrase, and sentence drills. The needed words are incorporated in the spelling and word study periods which should precede all written work.

c. Blackboard work whenever possible, under the direct supervision of the teacher who helps with the new or unusual words, prevents grammatical errors, makes suggestions to improve structure and form—in short, she makes success possible to each child according to his ability by the encouragement which she gives. The purpose should be to keep the work spontaneous, joyous and worth while throughout by having a well-defined motive which is valid to the children coupled with the teacher's genuine enthusiasm.

d. Class criticism of work on blackboard; positive and negative, leading children to be severely critical of their own work. Correction of the first draft, and copy made by children. In the first instance the attention is centered upon the content, the flow of thought; in the second, technique. Both papers should be kept and comparisons made a month later to note improvement in spontaneous expression and habits of spelling, punctuation and writing.

e. One individual or composition under the direct supervision of the teacher and one written independently as seat-work after careful preparation may be considered enough required work for the week.

3. *Dictation:*

a. A short paragraph containing only those points of technique that the teacher wishes to become habits in this grade.

b. Present the paragraph upon blackboard in perfect form; writing, technique, spelling. Discuss the technical points, through showing and telling, riddles, and other games emphasizing by

simple statement the office of each. Leave on board two or three days for silent study. Erase, and dictate. Have some children record work on blackboard.

c. Class criticism of work done at blackboard; training children to look upon their own work with critical severity.

4. *Letter writing:*

Children of the third grade should have some experience with simple letter writing, and real live situations should furnish motive for this form in which children are very keenly interested. Some familiarity with the letter form should be gained through imitation of good models. Most of the letters should be the result of co-operative work, but that makes them no less interesting if proper motives for correspondence are provided. Class letters to absent class mates, containing an interesting experience, as a school event, the story for the day, or other interests, delight both writer and recipient. Correspondence clubs between two classes in a school or different schools in the country or at a distance should be encouraged. Read to the class letters from children and famous people. The technique of letter-writing is observed, imitated, but not discussed to any extent. Fix the correct ideals now, secure a degree of correct habit and leave discussion to the later grades. The following suggestions should be observed:

a. Copy a model letter written by the teacher, or one, if short enough, from "Letters to Children."

b. Copy a class letter to an absent classmate. Be sure that it contains something interesting and spontaneous.

c. Copy a class letter to the Correspondence Club of which you are a member. Be sure that it throbs with interest in real things, and meets a real need.

d. Copy a simple business letter, as asking for seeds, for books.

e. Copy a class invitation to another class.

f. Dictate a short, simple letter previously presented on the board.

g. Make envelopes, and copy address correctly.

h. Independent or individual letter; relating some real experience in school or out-of-doors; relating an imaginary journey, or answering a real letter from a friend.

i. Correct form of heading, salutation, signature, should be uniformly required and fixed through repetition.

III. Technical Work

1. *Points of form:*

Emphasize use of margin, proper way to write title—paragraphing, formation of letters, spacing, punctuation—through discussion and strict observance of these details until they become automatic. Accept no work careless in appearance. *Children should be required to look over their work carefully before submitting it to the teacher.* The work should be corrected in class by use of blackboard wherever possible.

NOTE—Detailed suggestions will be given in a later revision of this course.

IV. Common Errors of Speech

While attention is directed to different phases of technique in both oral and written work, the eradication of errors is of slow growth. It seems advisable, therefore, to give special attention to *certain errors in each grade* and by special instruction and drill, provided the needs of the class warrant such an expenditure of time effectually weed out the most common errors. In the first grade attempts are made to establish certain correct habits of speech; in the second grade and third grade these will of necessity have to be reviewed, and new forms added. Suggestions will be found in a later revision of this course.

V. Applications of Technique

The medium through which much of this work will be presented is the class or co-operative compositions, the dictation exercises, and the reading seatwork.

Observe technical points, *use* them as needed, and *teach* when the need becomes frequent. Continue *drill* until they reach the *habit stage.*

VI. Standards for Promotion

The oral work of this grade should increase the pupil's power and facility to converse about a subject simply outlined; to re-tell stories showing a reasonable grasp of the thought and some use of appropriate language; to describe in a simple, intelligent manner, incidents, games, and experiences; and to recite naturally the poems taught.

By the close of the year the child should be able to write a simple paragraph—after oral presentation; should write brief letters correctly; should write correctly a simple paragraph given as dictation, after study; should write correctly a short poem committed to memory.

As this new reprint of the Course of Study goes to press (1918) it seems only fair to ourselves to state that for a year the teachers

of all the grades in the County have been revising the work in composition, by means of an intensive study, through committees, of inventories, minimum essentials, standards for promotion, and the project and problem method. The results of the work of this committee will not be ready for publication until 1919.

FOURTH GRADE

The language work follows the same general lines as in the preceding grades, but involving larger units, more definite knowledge of principles of teaching and greater self-reliance in creative effort. This is the period for the acquirement of mechanical skill, and habits of spelling, punctuation and speech should receive special attention. Motivated work is a necessity to secure results. There is the need for *communication* which leads to the writing of simple business letters, as asking for a package of seeds from the Agricultural Department, or a set of books from the circulating library, invitations to class plays, notices and advertisement of class school affairs. There is the desire to *share* with others which results in the friendly letters, in the correspondence clubs, recording information and experiences for another's enjoyment, making plays, original stories and poems.

There is the motive of *preservation* which makes it seem worth while to record in some permanent form outlines, summaries, stories gleaned from history, geography, and nature, loved poems and even original verse and songs. The class and individual booklets for personal use, for exchange in class and between classes come to have significance from this standpoint.

There is the same necessity for training in oral composition though written occupies seemingly more attention. Each recitation tests the pupil's ability to express himself clearly and exactly. Growth in the power of expression should keep pace with growth in knowledge and experience. Care in the use of language needs to be stimulated and guided by furnishing ideals for imitation and by judicious correction. The daily exercise as the outgrowth of well-organized thinking is of great value in developing the child's powers of observation, in increasing his vocabulary, in training him to express himself in the presence of others. Thinking in relation to a preconceived plan should precede all written work. We learn to write by writing and the mastery of technique is acquired by short daily exercises and the occasional long one.

Criticism of written work should strengthen the habit begun in third grade, the definite aim being to make the pupil view his own writing critically. Ideals of written work are presented through the

medium of the occasional class or co-operative work, through the dictation for the specific study of technical forms, and through discussions of individual records. But even this is not sufficient to establish habits which will carry over into the unsupervised work, because there the child is concerned with both form and content. Since spontaneity, ease and flow of thought is desired the first writing should be done under the impulse of interest and desire to express oneself. This does not exclude necessary preliminary work with unusual words, phrases and even troublesome forms of technique, for it is the teacher's business to put the pupil in control of his tools; the thought and the vehicles of thought. This first draft should be surveyed as critically as a fourth grade child is able to do, correcting errors. After correction by the teacher a copy in permanent form may be made. The attention is now centered upon technique of writing, spelling, punctuation, neatness, and suggestive illustration and decoration. Both copies should be kept for comparison with later work. Few long compositions will be written during the year, but better English habits together with an increasing feeling of satisfaction or dissatisfaction with results will be attained. The development of this critical attitude will materially aid in the acquirement of automatic mechanical skill.

Time allotment: 30 minutes per day, 150 minutes per week.

I. Oral Composition

1. *Conversation:*

a. Each recitation in history, geography, nature study, literature, industrial arts, is an opportunity for oral composition, and should be so regarded. While the work is free and primarily concerned with thought-content, yet form should not be disregarded. Conscious effort placed upon the technique of language, and guided by the teacher, becomes a test of the directed exercises. The same general principles are considered essential: first, a social situation, and a motive sufficiently impelling; second, clear thinking; third, simple, orderly, and attractive expression. The teacher should look upon the recitation as a class or co-operative composition based upon an outline to which all contribute, with a summary at the end, by one or more children.

b. Specific exercises for training in language technique through the mediums of spontaneous interest and motivated work. Abundant material is found in *narration* of experiences; *descriptions* of persons and places, of dramatic and other games, of experiments; of pictures; *summaries* of observations both in school and out, which may be termed simple *expositions*.

c. Limit the subject to a specific problem commensurate with the pupil's ability for vivid and vigorous portrayal, but keep the individual touch. Respect originality. Simple outlines aid in coherent composition.

d. Stimulate thought and under its impulse the pupil will choose the form most convenient for his purpose. Simple narrative form, simple description, simple exposition may be freely used, emphasizing personification, drama, dialogue or verse through the oral composition and may be adopted by the individual when the need arises.

e. Skillful questioning, and simple outlines, made by both teacher and children will give some training in orderly arrangement, structure of sentences, and choice of appropriate words and phrases. Some respect for the beginning, middle, and end of a simple story or theme will be gained.

f. Records should be made weekly by the teacher of the best oral compositions, the summary of the class or co-operative work. Occasionally records should be made by the pupils.

2. *Story-telling:*

a. Stories reproduced in parts and wholes as in preceding grades. Dramatization should be used for further appreciation and as a basis for written class dramas.

b. Reproductions of stories modified by varying the form of the original, as by dialogue; additional scenes or different endings.

c. Original stories in imitation of well-known fables, rhymes and fairy tales; the situation suggested by a well-known proverb; the occasional poem; the making of an imaginary biography. Pictures, nature, plays, and work, will readily provide suggestive interests. The teacher's chief business is to lead the children to realize their experiences and to cast them into purposeful and well-planned expression, using literature to furnish ideas as well as background.

3. *Memorizing:*

a. Poems and a few prose selections should be used in order to gain an increasing command of a suitable vocabulary, ideas of clearness, logical arrangement and elegance of expression.

b. Better speech control, as evidenced in voice quality, clearness of speech, and expression.

c. Story of poem may be changed into dramatic form.

4. *Pictures:*

a. Choose pictures which illustrate or suggest well-known stories and poems. Stories told, as given in the original, then modified.

b. Original stories suggested by the picture, thus teaching children

to read a story in a picture. Famous pictures by well-known artists should be used.

II. Written Composition

This work involves the paragraph as a unit of expression. The form and use have already become familiar th ough the class story and the individual work of the preceding grades and the reading material. The oral composition has helped to emphasize how to think out a subject in parts and how to place it in a definite order, as well as some respect for attractive or pleasing expression. Simple outlines made by children under teacher's guidance, aid good construction. The written work should come in response to a felt need which the children recognize as valuable, viz: desire for *communication, sharing* and *preservation.* There should also be stimulated the desire to practice written composition as one would practice the multiplication table, this being accomplished through short daily exercises which supplement the longer compositions.

1. *Class or co-operative work;*

The work will be continued in this grade, though less frequently, and as occasion demands. It serves its best purpose in the summary of history, geography or of nature lessons, and in the introduction of unusual or unfamiliar forms, as the drama, the letter, invitation, or original verse. Just as in preceding grades, there is necessity for a record of oral class compositions since they furnish ideals worthy of imitation and give opportunity for discussion of technique. They should be copied and often enlargement and artistic illustrations by the individual should be encouraged.

2. *Individual work:*

a. Careful oral preparation shall be made, including the clearly defined motive for a record.

b. Eradicate through the medium of the class story, the dictation, the needed words incorporated in the spelling lessons which precede the written work, such word and technical difficulties as may arise.

c. Some members of the class should work at the blackboard. All work should be done under direct supervision of the teacher who prevents grammatical errors, suggests better form and structure, giving such encouragement that each pupil is stimulated to his best effort. The purpose should be to keep the work spontaneous and joyous throughout, and at the same time encourage exactness in English habits. A well-defined motive which the children recognize

as worth while coupled with the teacher's own enthusiasm and desire to establish correct habits will accomplish this.

d. Class criticism of work on blackboard; positive and negative, will lead children to be severely critical of their own work.

Correction of the first draft, by the individual and then by the teacher; copy made by the pupil. In the first instance the attention is centered upon the content, the flow of thought; in the second, technique. Both papers should be kept and comparisons made a month, a quarter, a year, later, to note improvement in spontaneous expression and habits of spelling, punctuation and writing.

e. One individual composition under the direction of the teacher, and one written independently as seatwork after careful preparation may be considered enough required work for the week.

3. *Dictation:*

a. Give short paragraphs, containing a gradually increasing number of technical difficulties to be mastered and applied.

b. Present the paragraph upon board in perfect form; discuss the technical points emphasizing by simple statement the office of each. Silent study two or three days. Erase the unit, and dictate.

c. Class criticism of work done at blackboard trains pupils to look upon their own work with critical severity.

d. Exercises to test the knowledge gained and to secure habits of skill.

4. *Letter writing:*

This form of composition needs especial emphasis since letter writing is the common means of communication used in every day life. But letter writing becomes aimless and perfunctory unless some means for appreciation of its real value are introduced. To this end Correspondence Clubs are invaluable in providing motive. Two classes in the same or different schools in the county, or at a distance should plan correspondence for a specific purpose and in this way make letters real. Classes should compete with each other in the attainment of correct letter writing habits. To this end, there should be special lessons.

a. Parts of a letter. Practice writing the heading, the salutation, the ending, the signature. Discuss the body of a letter.

b. How to address an envelope. Exercise in addressing until correct habit is instilled.

c. Kinds of letters; notes, invitations, friendly, business, imaginary.

d. Content in letters determined by the kind. A Correspondence Club offers many opportunities; school needs, as books from the

circulating library, communications telling of work accomplished, courtesies extended; requests for information suggested by a subject of study; imaginary letters suggested by reading and discussion.

e. Give as model, a letter from Lewis Carroll, to a little friend. Discuss and have parts copied.

f. Write class letters when occasion offers.

g. Read "Children's Letters" from famous writers to class for purposes of enjoyment, and to furnish ideals.

III. Technical Work

Detailed suggestions will be given in a later revision of this section.

Points of form:

Emphasize use of margin, proper way to write titles, paragraphing, punctuation. Insist upon strict observance of these details until they become automatic. Accept no work careless in appearance. Children should be required to look work over carefully before submitting it to the teacher. Work should be corrected in class, whenever possible.

IV. Common Errors of Speech

While attention is directed to different phases of technique in both oral and written work eradication of errors is of slow growth due to environment, instruction and practice. It seems advisable, therefore, to advocate concentration of attention upon a *few fundamental errors in each grade* with the purpose of eliminating them. Special instruction and frequent drills, provided the needs of the ma ority of the class warrant the expenditure of time, will effectually weed out the most common errors.

V. Application of Technique

As in previous grades the medium through which much of this work will be presented is the class or cooperative compositions, the dictation exercises, exercises in Woodley's English Book I, selected from pp. 1-90, and the reading seatwork.

Observe technical points, *use* them as needed, and *teach* when the need becomes frequent. Continue *drill* until the *habit stage* is reached.

VI. Standards for Promotion

One lesson a week under supervision is the minimum requirement in each of the following: Oral composition, Class Story, Dictation for instruction in technique; two lessons per week will be given

to individual or independent composition; the first, devoted to the formation of the outline, the oral composition, and the first draft written work; the second, to discussion of technique, correction of errors, and rewriting or copying the corrected composition. Exercises for extending practice and testing skill are given daily in unsupervised seatwork.

For advancement to Fifth Grade, the pupil is expected to be able to relate an incident, to summarize a lesson, to tell in a natural and pleasing manner, a short story or poem which he has heard or read, showing a fair apprehension of the thought, and a reasonable use of appropriate and correct English.

Text for the grade: (Woodley, Book I., use, if there is a full supply on hand.) Hosic and Hooper, Book I.

NOTE: As this new reprint of the Course of Study goes to press (1918) it seems only fair to state that for a year the teachers of all grades in the County have been revising the work in composition, by means of an intensive study, through committees, of inventories, minimum essentials, standards for promotion, and the project and the problem method. The results of the work of these committees will not be ready for publication until 1919.

COMPOSITION AND GRAMMAR

SUGGESTIONS AS AIDS FOR THE TEACHING OF COMPOSITION IN THE GRAMMAR GRADES:

I. Aims: "WATCH YOUR SPEECH"

"All that you have to say about good speaking and good writing might be summed up in two sayings: 'Mean what you say;' 'Say what you mean.' Like most important commands these are easier to remember than to obey; indeed, complete obedience to the second command—'Say what you mean'—involves the mastery of the art of composition." (Briggs and McKinney.)

"An individual's speech is more influenced by the language heard around him, in the school and the home, than by any other factor in his life; and his inner speech: (a repetition or rehearsal of the words in reading, writing and speaking)—is the means of transfer. These inner rehearsals together with writing English have more effect than giving him practice in oral speech. William James recommends repeating by inner speech sermons or speeches to which we are listening." (Thorndike.)

Sheridan, in *Speaking and Writing English*, gives the following suggestions in his attempt to define the aims for spoken and written English:

1. What are the common language needs of people in every day life?
2. What specific language habits can the school cultivate which will most usefully meet the demands that will be made upon the boy and girl at the end of their elementary school course?
3. What capacity for oral and written expression is possessed, or may with reasonable effort be acquired, by ordinary children in the different grades?

In the light of such a study of children's language needs and capacities, the following would seem to be a reasonable and workable aim for the elementary school:

1. To turn out pupils able to stand before the class and talk for a minute or two upon a subject within the range of their knowledge or experience, speaking plainly, in clean-cut-sentences, and without common grammatical mistakes.
2. To turn out pupils able to write with fair facility an original paragraph upon a subject within the range of their experience or their interests.

Such a paragraph should show:

1. An absolute mastery of "the sentence idea."
2. Freedom from glaring grammatical mistakes.
3. Correct spelling of all ordinary words.
4. Unfailing use of the commonest marks of punctuation.
5. Some evidence of attention to matters of sentence structure and to the choice of words.

And for Spoken English Mr. Sheridan gives the following needs of the school:

It is much more important that the elementary school should give pupils ability *to talk well* than it is that it should give them ability *to write well.* This is simply because people talk more than they write . . . . .

There are several reasons why our pupils do not learn to talk well:

1. There is not enough of oral language work, as a separate and distinct training in the elementary school.
2. Oral work is not utilized as much as it ought to be as an aid in, and a preparation for, written work. The child who is to be taught to write well must first be taught to talk well.
3. The other school subjects are not utilized as effectively as they might be to develop power in oral composition.
4. The common method of the recitation furnishes little motive for the pupil to talk well. Very rarely has he the sense that he is addressing an audience with the purpose of saying something worth while . . . . .
5. The school has perpetually to fight the bad influence of the language environment in which many pupils spend their out-of-school hours.
6. The school makes the mistake of thinking it can correct bad habits of speech by the application of the rules of grammar. The ability to talk correctly comes from practice and not from the study of rules . . . . . .

An effective course in oral composition should include the following essential things:

1. Much opportunity for free self-expression.
2. Constant attention to matters of voice, enunciation, pronunciation, and inflection.
3. The training of children, by constant practice, to compose oral paragraphs upon simple themes, and the development, through these, of some elementary skill in selecting, arranging, and expressing their ideas.
4. Unremitting efforts in all grades to eliminate the common errors of speech.

II. Materials for oral composition:

The topics should be, "*purposed, planned, executed, and judged* by the pupils either individually or in cooperation:"

1. The child's daily experiences.
2. Stories retold from literature.
3. Nature-study topics developed in the class room.
4. Geography topics.
5. History topics.
6. Current events.
7. Games.
8. Literature, prose and poetry.
9. Pictures.
10. Industrial arts.
11. Manual training and cookery activities.
12. Dramatizations.

"Every observant teacher knows that children are interested in (a) the world of external facts about them; (b) the world of story, whether history or fiction; (c) the explanation of things.

In general, therefore, the material for composition must be drawn from the child's daily home and school experience and from the stories which interest him.

Here is the teacher's opportunity and duty—to find the material that the pupil knows, and bring him to an expression of it. It must be sufficiently knowable by the child to give him some clear and definite things to say, and it should stimulate his observation and thought.

The material chosen should afford opportunity for the arrangement of ideas into some sort of unified form.

Everything he tries to say should be well said—that is, well composed; if it is not well said, it is not well known. The pupil should be expected to express himself clearly, concisely, correctly and, if possible, aptly in all. Faulty oral work—the clumsy, incomplete sentence, bad grammar, the inappropriate word—is every whit as serious a defect in oral as in written work, and the excuse for dealing less deliberately and emphatically with it is that the correction of some errors is more difficult in the oral recitation than in the written; more dangerous, too, as interfering with the thought process, while it unduly delays progress."—Chubb.

III. Materials for written composition:

The topics should be "*purposed, planned, executed and judged* by the pupils either individually or in cooperation."

See subjects for oral composition; also letters—business and social correspondence.

IV. Kinds of composition:

The daily class work and daily living outside of school call for every kind of composition: narration, description, exposition and argument. For instance, narration is called for pre-eminently in history work; description in history, geography, and science; exposition and argument in arithmetic, history, games, industrial arts, household economics, and manual training. Letter writing alone calls for the four kinds. The four kinds must therefore find place in our plans, but not necessarily as distinct kinds for a well written narration always contains some vivid descriptive elements; and description is seldom pure description.

V. Letter writing:

"Nowadays there is scarcely a person who does not at some time write a letter or wish to write one (yet it is) an undoubted fact—that what all are doing somehow, few are doing well. . . . . Here is a task then for a writer; to send his greeting, his best self through a letter, to be jolly, thoughful, sympathetic, as the case may require, and yet write nothing that he will afterward be ashamed of or regret having written." (Briggs and McKinney.)

Business letters must be as brief and concise as possible.

Friendly letters must be interesting and show feeling about the subject discussed, and opinions concerning it all. The writer must be definite, especially in details, point of view, and words.

The following suggestions for "form" in letters are taken from Briggs and McKinney, *A First Book in Composition:*

1. Form in letters:

a. "Pen and ink should be used almost invariably.

b. "Good and suitable paper should be selected for letter-writing, usually plain white, of medium weight and unruled.

c. "Considerable freedom is permitted in the order in which the pages are written; but by far the most people use, and all should use, the natural order, beginning with the fold to the left and filling the four pages in succession from the top to bottom.

d. "Work for interesting beginning sentences and acceptable forms of leave-taking.

e. "Friendship may endure, even though one correspondent or both may neglect social decencies in writing. But courtesies and conventions are as exacting in letter-writing as in any other phase of social life."

VI. Writing original poems and short stories:

"But besides the work that grows out of the various studies and letter writing as a means of personal expression, there is yet another kind of composition that is equally important; that, namely, which grows out of literary study and calls upon the more purely literary and poetic inventiveness and constructiveness of the child. This is the counterpart of the work that is being done in reading, especially the work of the ballad and short story. The attempt made in the interests of appreciation to bring home to the child a feeling for the convincing and felicitous progression, climax, surprise and unity of the master pieces of balladry and fiction, and gradually to give him an insight into the simpler principles of construction—beginning, middle and end; introduction, development and conclusion, setting and character grouping; the plot—weaving in short, that has such a fascination for children—this must have its outcome in the child's own effort to invent and create, and to master the joinery of the story-teller's craft."—Chubb.

a. *The following attempt by a class at writing original verse* was made in the Fifth Grade of the Garrett Heights School, Miss Georgia McDonnal, teacher. It is worth-while work as her account proves:

Ballad Study; Fifth Grade Work

First of all, in the teaching of ballads, one must create for the child a background. We need only go to the story of Pyle's Robin Hood for this. The ballad is there mentioned many, many times. The way ballads were made is also suggested: "Many ballads were both told and sung." These ballads have come down to us from mouth to mouth through the centuries without bringing a hint as to their author. A ballad was a dance song, usually beaten out by the stamping of feet upon the ground. In Europe centuries ago it was customary to improvise ballads when strong excitement prevailed—as at a festival of the seasons, or on the eve of a battle, or after a great victory—and to sing and dance them out on the village green or in the public square or market place.

Ballads are classified as follows: (1) mythological, (2) historic or traditionary, (3) romantic, (4) humorous, (5) modern.

In taking up the work with my own fifth grade I began with several simple bal-

lads of Robin Hood which belong to the humorous class, the plots of which the children knew. Here we noted the quaint words and phrases, the repetition, the rhyme and the meter.

From the "humorous ballads" we passed to a study of "mythological" or those which contain the element of superstitition. I chose "True Thomas."

Ballad: "True Thomas."

The method of presentation was as follows:

1. Explanation of unusual words and phrases (written on board).
2. Reading of ballad.
3. Questions for understanding first and then for appreciation.
4. Filled in gaps—aided imagination in clearing up story.
5. Children retold story.
6. Selected quaint phrases and words, such as—
   "grass-green silk,"
   "milk-white steed,"
   "red-blood,"
   "aboun the knee,"
   "ilka tett" (every lock),
   "lillie leven."
7. Selected mythological touches: Example:
   (a) "And if ye dare to kiss my lips,
   Sure of your body I will be."

To kiss a fairy or a ghost always puts mortals into the power of the spirits of darkness.

(b.) "O no, O no, True Thomas."

He who eats of the food of fairyland will never live to return to earth. So the queen takes back with her from the Earth a loaf and a bottle of wine as food for Thomas, who, after serving her seven years, will go back as prophet to his people.

8. Teacher re-read the ballad.
9. Children repeated any parts they remembered.

Ballad: "The Wife of Usher's Well."

This is considered the finest type of the superstitious ballad. The method of procedure here is similar:

1. Recalled modern superstitions.
2. Read ballad.
3. Few questions to show drift of story.
4. Questions for appreciation.
5. Named superstitious touches:
   "The fulfillment of the evil wish;"
   "The crowing of the cock was considered a warning from the other world."
6. This ballad lends itself to dramatization, so we dramatized it.
7. Memorized it. This is quite easy, because of the repetition.
8. Noted some ballad characteristics:
   Repetitions.
   Dialogue without naming speakers.
   Mannerisms, such as "up and spake," "up and crew," etc.

Ballad: "The Douglas Tragedy."

I selected "The Douglas Tragedy" as a type of the romantic ballad.

1. Recalled adventurous stories—mostly fairy tales.
2. Explained words and phrases.
3. Read ballad.
4. Note the difference between the movement in this and in "The Wife of Usher's Well."
5. Questions for understanding and appreciation.
6. Picked out familiar phrases—
   "milk-white steed."
   "dapple gray,"
   "bonny red rose,"
   "make my bed broad and deep."
7. Marked superstitions—
   "Looked over his left shoulder" (considered unlucky).
   "Out of the lady's grave grew a bonny red rose,
   And out of the knight's a brier."

There was a beautiful old Norse fancy of plants springing from the graves of star-crossed lovers, and signifying by the intertwining of stems and leaves that an earthly passion has not been extinguished by death.

8. Noted the repetitions.
9. Children named words and phrases they liked.
10. Seat work:—
    a. Illustrated a line or lines of the poem.
    b. Wrote the ballads in prose form.

Examples of the "traditionary" ballad are Sir Patrick Spens and Chevy Chase, both of which are adapted to the fifth grade. We studied these two in detail.

After such a course of study lessons we were ready to write a ballad. We used Pyle's Robin Hood as a basis for our ballad and the typical ballad metre as shown in Sir Patrick Spens. The effort is a piece of co-operative classroom work covering a period of twelve English composition periods of twenty-five minutes each.

How Robin Hood Met Little John

I

Up rose Robin one merry morn,
"For fourteen days," said he,
"We've had no merry jest or sport
Save 'neath the greenwood tree.

II

"Tarry ye here, my merry men,
Here 'neath the greenwood tree
Until that on my buglet horn
I blow my blasts of three."

III

Off toward the town of Nottingham
Strode merry Robin Hood.
At last he took a small by-path
Led thro' the dark deep wood.

IV

O he walked on and on he walked
Till to a stream he came,
And there he spied a single log
On which to cross the same.

V

On farther side about to cross,
A stalwart stranger stood.
"Now let the better man cross first,"
Quoth merry Robin Hood.

VI

"Now stand thou back," quoth the stranger,
"The better man am I."
"Nay that shall we presently see,
When our skill we shall try."

VII

Robin Hood stepped to the coverside,
A stout cudgel fetched he;
"Lo here is a good lusty staff,
Now come and fight with me."

VIII

Each stood his place for one good hour,
Sore bones and bumps they had,
Till down went Robin, heels o'er head.
I ken he was right mad.

IX

Quoth the stranger, "Where art thou now?"
Laughed Robin, "Afloating the tide!
Now give me thy hand, good fellow,
And help me to thy side."

X

Then to his lips he clapped his horn,
He blew his blasts of three;
Through rustling branches came his men
To see what his need might be.

XI

"Truly thou art wet from head to foot,
That to the very skin."
"Yon tall stranger hath drubbed me good,
Besides hath tumbled me in."

XII

"Then shall he have a good ducking,
And eke a drubbing, too."
"Nay, nay," cried merry Robin Hood,
"He's a right good man and true."

XIII

"Hark ye, youth, wilt thou stay with me
And be one of my band?
Three suits of Lincoln green you'll have,
The best that's in the land."

XIV

The stranger quoth, "Aye, that will I,
For good sport I love well."
"Then I have gained a right good man,
Thy name I prythee tell."

XV

Then the merry stranger answered.
"John Little is my name;
I fain would have it otherwise,
It must not be the same."

XVI

"Little art thou, indeed," quoth Will,
"And small of sinew, too.
Thou shall be christened 'Little John,'
God father I'll be to you."

XVII

"So be it," answered Robin Hood,
"Little John it shall be.
So come my merry men, one and all.
Home 'neath the greenwood tree."

XVIII

Then to the greenwood tree they went,
A right good feast to hold;
The fire was made and the fat does cooked
Which feasted these men bold.

XIX

Thus ended this merry ballad
Of this adventure bold.
Many times in good old Sherwood
Hath this good tale been told.

b. *The following is another attempt to write poetry by pupils in a sixth grade.*

The class was under the direction of Miss Ruth Redeker of the Mt. Winans' School, and Miss Redeker's account of the lesson is as follows:

As home assignment, the children (it was a sixth grade) searched for titles of poems that told about "sunrise" or "sunset" or "the day" itself. They looked through the table of contents of several volumes of poems written by different authors, and quotations, which appealed to them as particularly beautiful, were found under these titles, and brought to class. These were discussed in class and the quotations which the class thought expressed particularly well what the author wanted to say were written on the blackboard, and copied by each child. It was surprising to see how many the children found; they seemed innumerable.

With these aids to a vocabulary we set to work to write our poems, each child being urged to treat the topic in the way that appealed to him most vividly; it could be sad, glad, descriptive, or narrative; and each child felt perfectly free to incorporate any phrases he might have absorbed from our work with the poets. The folllowing are some of the results:

SUNRISE

The red sun flashes in the eastern sky,
When Helios drives his horses by,
And like an artist with his little brush extended,
Makes glowing morning wonderfully splendid.

MARY DUCKETT.

SUNRISE

Up comes the sun slow and steady,
And lets the night go by,
And peeps her head out of the sea
To sail in the glorious sky.

ANTON HEINERMAN.

SUNRISE

When the golden sun salutes the morn,
And the moon and stars are left forlorn,
Then Aurora with her robe of white,
Pulls past the curtain of the night.

CLARA BERG.

SUNRISE

And after our night's rest of sleep,
The sun from the morning clouds did peep,
And painted our sky in colored bands,
And left the night in other lands.

MARY DUCKETT.

SUNSET

After a weary, restless day
The sun drives west in a bright array
To paint the sky in a glorious gold.
We watch him while he hides from sight
And steals away to leave us night.

FLORENCE ARNOLD.

VII. Standards for judging a composition (Briggs and McKinney):

1. The first motive of speech, oral or written, is *sincerity*. Sincerity is being true to ourselves. We must report as we ourselves see or feel or think. *Choose a subject about which the child may have real thoughts or feelings* and insist that he use words that are his own.

2. Customs of the times and our language determine what is considered *good form* in a composition. Find out what the best custom is, then form habits of following it without giving it much thought or attention. But to form these habits takes constant attention in the beginning.

3. A composition must be *definite* in four ways: first, in subject; second, in details; third, in point of view; and fourth, in words.

4. Sincerity, good form, and definiteness are helpful to *interest* but these are not enough. Some other ways of being interesting should be considered. A theme should be written with some possible reader clearly in mind and with the distinct purpose of securing and holding that reader's interest, of making the thought clear to him, and of producing the desired effect in his mind.

5. But even the added element of interest is not the end. The speaker or writer may tell about too many things and give too many impressions. Such a composition lacks *unity*. Unity means that a composition tells all about one thing and is expressed in such a way as to give one impression. There should be unity of the subjects for composition, unity of paragraphs, and unity of sentences both as to thought and form.

6. There is nothing so uninteresting as monotony. *Variety in expression* makes a subject interesting. A large stock of words and sentence-forms, and ways of developing ideas so that we may have them ready to fit any thought that we wish to express—all these contribute to the best literary style and help to make the reader conscious only of the thought.

7. There must be *coherence*, or connectedness, throughout a composition. To coherent writing and speaking two things are necessary: (a) vital connection in thought, (b) clear expression of that connection. To this clear coherence of composition there are five principal aids:

a. logical arrangement or order;
b. wise use of connectives and words of reference;
c. proper subordination of the less important ideas;
d. forms of sentences:
e. avoidance of all blurring ellipses.

VIII. Technique:

1. Forms of Expression—sentence:

One of the first essentials to both clear thinking and clear expression is a sense of the form of the sentence. It is a unit of thought as well as a form of thought. Imperfect sentences written by the children should be made better by the class. The following sentences show some types of children's errors:

a. Herbert Lansing is captain of our baseball team and the north pole has been discovered. (Combines ideas that are not at all related; an error in unity.)

b. a. The woman is ill. b. She is the mother of the butcher. c. Meat has advanced in price. (The first two ideas should be combined in some such way as "The woman who is ill is the mother of the butcher." And the third sentence should be omitted since it spoils the unity of the thought.)

c. I drove in a buggy until we were within a mile of the river, at that point one of the front wheels broke. (This is the ordinary "common blunder." The writer tries to tell two things but joins them as though they are one.)

d. There was tied by the door a large dog. Who jumped toward us fiercely. (This is the opposite of the "common blunder," and means the disjoining of expressions that properly belong together. The phrase and clause can here masquerade as a sentence.)

e. "Treasure Island" is as interesting as a dime novel but which teachers do not object to your reading. (An error in wrong co-ordination. When properly used *and* and *but* make for unity; otherwise they destroy it.) (Adapted from Briggs and McKinney.)

2. Paragraph: from Sheridan: *Speaking and Writing English.*

The following general standard was there set up as a reasonable measure of attainment in written composition for the ordinary graduate of an ordinary grammar school:

The ability to write with fair facility an original paragraph upon a subject within the range of his experience or his interests, using sentences grammatically complete and correctly punctuated, with correct spelling, and free from grievous grammatical mistakes. . . . . .

The chief reason for limiting the written exercise to a single paragraph is to assure sufficient practice in writing which a longer composition makes impossible, and to focus the attention of both pupil and teacher upon the smallest possible language field. . . . . .

It is not a question of whether children *can* be trained to write longer paragraphs or compositions of more than one paragraph, although no large proportion of the teachers of the country have yet demonstrated that it can be done. The writer believes that even if it were possible to train all the children in the grammar grades to write a long composition and to write it well, it would be a waste of time to do it. . . . . .

A good subject is half the battle. Children cannot be expected to write upon a subject about which they know little and care less. You cannot get blood out of a turnip.

Children must be taught, therefore, to narrow their subjects. This focuses thinking, and establishes a single point of view. They must be trained to single out some particular point and work that up for all it is worth. . . . .

3. Types or Models for Imitation: from George Herbert Palmer, *Self Cultivation in English.*

"Ordinarily the good speaker, or writer, is he who keeps good company. Let him who would speak or write well seek out good speakers and writers. Let him live in their society . . . . . let him feel the ease of their excellence, the ingenuity, grace, and scope of their diction, and he will soon find in himself capacities whose development may be aided by the precepts I have given. Most of us catch better than we learn. We take up unconsciously from our surroundings what we cannot altogether create. All of this should be remembered, and we should keep ourselves exposed to the wholesome words of our fellowmen."

Not only the standard authors: Kipling, Stevenson, Pyle, Thackeray, Shakespeare, Tennyson and the rest, should be put before our pupils but the best the pupils themselves have said and written should serve as models for their classmates.

4. Arrangement of papers, marking papers, criticism of papers.

a. *Arrangement:*

Form in general (Briggs and McKinney).

1. Place the title, correctly capitalized, on the first line near the middle.
2. Leave a margin of at least an inch at the left hand side of the page.
3. Leave no meaningless spaces at the right hand side of the page.
4. Indent the first line of every paragraph, or group of sentences on one topic, at least half an inch beyond the margin of writing.
5. Never indicate a new paragraph unless there is a real division of thought.
6. Write legibly and neatly; use ink unless otherwise directed.
7. Place your name at the close of your composition—name on one line and the date on the next line. Punctuate the date correctly.

b. *Marking and criticism:*

For effectiveness in the criticism made (Carpenter, Baker and Scott).

1. Determine the ordinary errors and difficulties first to be attacked.
2. Make these errors and difficulties the subject of class instruction.

3. Present the models of the thing well done.

4. Give help on the new difficulties, but hold the pupil responsible for the things he ought to know.

5. Refuse to accept work that is below the standard.

6. Distinguish between inability and slovenliness.

7. Require the pupils to make the corrections called for.

8. Assist the pupils to think clearly by searching questions and an outline.

9. Note individual difficulties; treat these as far as possible in brief personal interviews.

10. Be as keen to commend good work as to reprove bad. Read specimens of good work to the class.

11. Let the criticism be constructive rather than destructive.

12. Keep a just balance between the critical and productive faculties of the child. To exaggerate the former is to inhibit activity, to overestimate the latter is to cultivate carelessness.

c. *For economy of the teacher's time and energy:*

1. Attack a few difficulties at a time and let those be typical.

2. Concentrate the attention upon things that may be learned until they are learned.

3. Use symbols in red ink or blue pencil along the margin calling attention to the errors which the pupil *can* correct.

4. Have the corrections made by the pupils, then read the composition again.

5. Make the criticism of important matters a cooperative class lesson.

6. Reject all slovenly work.

7. Aim to stimulate the interest of the children and to promote as rapidly as possible their own powers of independent self-criticism.

8. Reserve time and energy enough to keep alive mentally by the reading that which both instructs and relaxes.

d. *A simple selection of symbols for marking is as follows:*

cap.—use capital letter
p.—punctuation
quot.—quotation marks
s.—no sentence
sp.—spelling
u.—unity
var.—variety
def.—definition
gr.—grammar at fault

?—questions a fact
¶—a paragraph
]—indent
'—apostrophe

e. *Plan to develop the pupil's power to criticise: (From Mahoney: Standards in English)*

It should be the aim of the teacher to give to the children the power intelligently to look over their work with a view to bringing that work up to the standard of correctness . . . . . .

The first of these principles is that there *must be some degree of progression in the work of correction.* It is useless to attempt to correct everything in every composition. No child should be expected to turn out an absolutely perfect paper.

In the second place, it is well to remember that the object of correcting is *not to mark* the pupil, but *to help* the pupil . . . . . .

Third, pupils should be taught how to criticize and how to appreciate intelligently their own and one another's work. Thus criticism by the teacher, which is indispensable, may be supplemented by efficient criticism by the writer's classmates. In teaching children how to criticize, teachers should have in mind a definite plan of development. Points like the following are suggestive:

1. Read the composition through.
2. Is it interesting? Tell one thing that made it so.
3. Did he write as if he were interested in his subject?
4. Did the writer keep to his subject? Did he put anything in it that was unnecessary?
5. Were any of the expressions new to you?
6. Mention any apt word that you noticed.
7. Indicate a particularly good sentence, or sentences.
8. Indicate a sentence or sentences that could be improved.
9. Help the pupil to restate it.
10. Correct grammatical errors.
11. Correct mechanical errors.

f. *Habit-formation* (Thorndike):

"The trend of modern language teaching is to pay more and more attention to specific habits rather than rules. . . . .

"There is need for speech that tells, there is need for speech that tells still better. The best time to form the habit of correct usage is the *very first time* the situation is met. Unconscious bad habits are hard to break.

"Teachers tend to neglect experiences with words whose correspondent reality is not easily presentable; Ex., *if, but, which, then, that, truth, even.*"

g. *Rules:*

But rules do grow out of experience and the following rules of grammar inductively formulated whenever the occasion requires, will serve as guides in the speaking and writing of English. These rules have been selected by the Revision Committee:

Rules of Punctuation and Capitalization

1. Begin with a capital letter the first and every important word in a title.

2. Begin with a capital letter the names of things personified.

3. Never use capital letters meaninglessly.

4. When the explanatory words follow the quotation, close the quotation with a comma, unless it is a question or exclamation; that is, when the words quoted would end with a period if unquoted; if they would end with an exclamation or interrogation point, do not change these marks in quoting.

5. When the explanatory words precede the quotation, set them off by a comma. Sometimes a long quotation is introduced by a colon.

6. Use a comma to separate the words *yes* and *no* from the rest of the sentence.

7. Use a comma to set off words in apposition, unless these are very closely united in idea with the words to which they are added.

8. Use a comma before *and, but, or* when they stand between the parts of a compound sentence, unless these parts are very short or closely connected in thought, or a heavier mark is needed.

9. Use commas to set off words, phrases, clauses thrown in or placed out of their natural order or somewhat separated in thought from the rest of the sentence.

10 Use the dash to make a sudden change in thought, or in feeling or in sentence form.

11. Use a semicolon to separate parts of a compound sentence when a heavier mark than a comma is needed or when the conjunction is omitted.

12. Use a colon to separate particular instances or examples from a general statement or summary.

Rules of Grammar

1. The subject of a verb is in the nominative case.

2. A noun or pronoun used as an attribute complement is in the nominative case.

3. The object of a verb or preposition is in the objective case.

4. The compound personal pronouns are formed:

a. In the first person by adding *self* to the possessive singular, *selves* to the possessive plural;

b. In the second person as in the first;

c. In the third person by *self* to the objective singular and *selves* to the objective plural.

5. The relative pronoun *Who* refers to persons, *Which* to

animals and inanimate things. *That* may have any antecedent; *What* takes the place of both antecedent and relative.

6. The pronoun of the first person always stands last in a series of nouns and pronouns.

7. The demonstratives are *this, that, those, these.* They may be used as adjectives or as pronouns. The personal pronoun *them* is not used as an adjective.

8. If in a compound subject the nouns are connected by *or* or *nor* and differ in number or person the verb usually agrees with the nearer.

9. *Ought* is a finite verb, not a participle, and therefore cannot be used with *have* or *had* to form compound tenses.

10. *May* indicates permission, possibility, wish.

Can indicates ability.

Shall indicates futurity in the first person.

Will indicates futurity in the second and third persons.

Will indicates promise, threat, consent, resolve, in first person.

Shall indicates promise, threat, consent, resolve, in second and third persons.

Should and *would* follow the same rules as do shall and will.

11. The comparative and not the superlative is used in comparing two persons or things.

12. Modifiers should be placed as near as possible to the word or words they limit. No modifier should be inserted between *to* and its infinitive.

IX. Scientific testing for composition ability:

Do you know what quality of description or narration a fifth grade pupil should write in comparison with an eighth grade pupil? For standardizing the work of the grades, see:

A Scale for the Measurement of Quality in English Composition by Young People, by Milo B. Hillegas, Teachers College Record, Vol. 13, 1912.

The Harvard-Newton Bulletin: Scale for the Measurement of English Composition, by Frank Washington Ballou, No. 11, 1914.

The Fourteenth Yearbook of the National Society for the Study of Education; Part I, Minimum Essentials in Elementary School Subjects, University of Chicago Press.

The Trabue Revision of the Hillegas Scale.

FORMAL GRAMMAR

I. Procedure:

The task of teaching grammar to young pupils is not easy. Its abstract nature repels, and its distinctions are sometimes difficult.

There are certain problems which arise in the work for the solution of which the following suggestions are offered:

1. "It is well to postpone the systematic treatment of formal grammar until the seventh year in school. It has been taught earlier, of course; but the immaturity of the pupil not yet arrived at the stage of development where the powers of abstraction are active, make the work arduous and distasteful, if not futile.

2. "It is very desirable that some of the elementary conceptions of grammar be taught early in the course, beginning not later than the fourth year, and gradually increasing the stock of grammatical knowledge until the subject is taken up as a systematic study.

3. "From the first consideration of the parts of speech throw the emphasis upon *function* as determining the class to which the words belong. To say that such and such a word is a noun used as a verb, or an adjective used as a noun, is a needless confusion of terms and ideas. In English the word is what its use in the particular context makes it. Only by keeping this in mind can we get the desired attention upon the logical aspect of grammar.

4. "The work must be made concrete. Abstract conceptions are meaningless unless linked with the power to render them concrete. Keep principle and examples close together. Start by preference with the example and make it clear that the rule or the definition is only the formula, the description, and not the real thing. It is easier, for instance, to make clear the essential nature of prepositions and conjunctions by lists of them *in use* than by definitions.

5. "There must be frequent repetition. Abstract ideas easily evaporate unless they are made a part of the very stuff of the mind, and they become so incorporated not merely by explanation and example, but by long familiarity and frequent application.

6. "The order of the procedure indicated above, that is from the sentence to the word, seems to be easiest for elementary pupils, though unquestionably they may be taught successfully by the opposite order."—Carpenter, Baker and Scott, p. 146.

II. Scientific experiments in English grammar:

REFERENCES: Franklin S. Hoyt, *Studies in the Teaching of English Grammar*, Teachers College Record, VII, No. 5, Nov. 1906; Thomas H. Briggs, *Formal English Grammar as a Discipline*, Teachers College Record, XIV, No. 4, Sept. 1913; W. W. Charters and Edith Miller, *A Course of Study Based upon the Grammatical Errors of School Children of Kansas City*, University of Missouri Bulletin.

Teachers should read these three publications in full. In order that the conclusions reached by the investigators may be available for the grade work and in convenient form we are summarizing them as given in the Fourteenth Year Book of the National Society for the

Study of Education, Part I. *Minimum Essentials in Elementary School Subjects.*

1. *The conclusions drawn by Mr. Hoyt from this study:*

a. A critical examination of the arguments usually advanced in favor of the study of grammar leads to their rejection, in the main, when applied to the present teaching of formal grammar as a separate subject in elementary schools.

b. It is therefore recommended that grammar should not be taught as a separate subject in the elementary grades, at least below the eighth year. And that only such grammatical facts and principles be taught in these grades as have a direct bearing upon the use of language for expressing and interpreting thought. Such grammatical instruction should be incidental to the practical study of language, and should evolve from it. During the last year of the elementary course pupils should systematically review and organize the knowledge of grammar thus incidentally obtained, so that it may be permanently retained in convenient form for use, and as a foundation for any future linguistic study.

To these is appended, by way of suggestion, an outline of such grammatical forms and classifications as might be taught in the elementary school. This includes:

1. Classification of sentences:
   a. As to form: simple, compound, complex.
   b. As to use: declarative, interrogative, imperative, exclamatory.
2. Phrases and clauses.
3. The parts of speech, with only such classifications of them as are actually of use; e. g., proper nouns for the use of capitals.
4. Inflections:
   a. Singular and plural forms of nouns, pronouns, and verbs.
   b. Declension of pronouns. (Case and person developed in connection with personal pronouns.)
   c. Possessive forms of nouns.
   d. Comparison of adjectives and adverbs.
   e. Principal forms of verbs, with little regard to conjugation, mode, voice, tense, etc.
5. The more useful rules of syntax; e. g., "A pronoun used to complete the sense of an intransitive verb is in the nominative case.

2. *Professor Briggs' report on grammar:*

Whether grammar provides an important means of mental discipline, Mr. Hoyt did not investigate. This task was undertaken some years later by Prof. Thomas H. Briggs at Columbia University. He made a survey of the claims which have been advanced for formal grammar as a discipline but found no experimental evidence to support them.

a. There was no gain in any ability which could be attributed to the work in grammar and surprisingly little, in view of the effort put forth, in the grammar itself.

b. While the future experiments may lead to different conclusions, the burden of proof, at any rate, is now upon those who believe that general mental discipline is obtained from the study of formal grammar.

3. *Professor Charters' report:*

a. More recently a study has been made by Prof. W. W. Charters, of the University of Missouri, which seems likely to be of considerable value in making out courses for schools. This was an investigation to determine what errors connected with grammatical rules were made by the children of Kansas City, and to determine upon this basis what rules should be taught to children in the elementary grades.

b. The language tests in use in the Kansas City schools were next examined and a statement prepared to show what might be omitted from them. The topics included in this "Index Expurgatorius Grammaticus" are:

Exclamatory sentence.
Interjection.
The appositive.
The nominative of exclamation.
The nominative of address.
The objective complement.
The objective used as a substantive.
The adverbial objective.
The indefinite pronoun.
The classification of adverbs.
The noun clause.
Conjunctive adverbs.
The retained objective.
The infinitive except the split infinitive.
Mood (except possibly the subjunctive of *to be*).
The objective subject.
The participle (except the definition and present and past forms).
The nominative absolute.
The gerund.

Two topics needed to be supplied, the pronoun *what* and proper and numeral adjectives.

c. "Positively the study seems to show that there are a number of grammatical principles which should be well taught. Among these are: (1) proper as contrasted with common nouns; (2) the possessive of nouns; (3) the formation of the plural; (4) the inflections of pronouns; (5) the uses of the relative pronouns; (6) the cardinal and ordinal numerals; (7) comparison of adjectives; (8) verbs as to kind, number, tense, and voice; (9) adverbs as distinguished from adjectives; (10) idiomatic uses of prepositions and conjunc-

tions; (11) placing of modifiers; (12) double negatives; (13) syntactical redundance, and of course; (14) the sentence as a unit. The number of failures to begin a sentence with a capital and end with a period or other proper mark was very large."

FIFTH GRADE

Read carefully "Suggestions for the Teaching of Composition and Grammar in the Grammar Grades," pp. 111-128.

I. Subject matter for composition, both oral and written:

1. Original fables.
2. Tell and write up jokes that happen in the classroom.
3. Re-tell and re-write stories from another point of view.
4. Complete stories.
5. Reproduce stories.
6. Compose stories.
7. Compose poems, especially the ballad (imitation of some author's style).
8. Interpret poems.
9. Write letters.
10. Tell how you do things—cook, play games, etc.
11. Study pictures.

NOTE: As this new reprint of the course of study goes to press (1918) it seems only fair to ourselves to state that for a year the teachers of all the grades in the County have been revising the work in both oral and written composition, by means of an intensive study, through committees, of inventories, minimum essentials, standards for promotion, and the project and problem method. The results of the work of this committee will not be ready for publication until 1919. We have therefore omitted from this form details of:

(1) Correct verb forms.
(2) Punctuation and capitalization.
(3) Technical grammar.
(4) Sentence study.
(5) Sentence classification.

It was decided by the "1915 Revision Committee" that the following definition of a verb be taught in this grade —

A verb is an action word and though the following words are not action words yet we call them verbs: is, am, be, are, was, were, shall, should, will, would, do, does, can, could, has, have, had, seen.

(This list is to be memorized.)

TEXT: Woodley, *Foundation Lessons in English*, Book One, Part II, pp. 93–197. (Use only if the Hosic and Hooper has not been supplied); Hosic and Hooper, Book I.

REFERENCES: Briggs and McKinney, *A First Book in English Composition*, Ginn & Co.; Briggs, *Laboratory Manual of Letters*, Ginn & Co.; Carpenter, Baker and Scott, *The Teaching of English*, Longmans; Chubb, *The Teaching of English*, Macmillan Co.; Bolenius, *The Teaching of Oral English*, Lippincott; Huntington, *Elementary English Composition*, Macmillan Co.; Bell, *The Changing Values of English Speech*, Hinds, Noble and Eldredge; Heydrick, *Short Studies in Composition*, Hinds, Noble and Eldredge; *Children's Letters* (Letters to children), Hinds, Noble and Eldredge; Wilson, *Picture Study* (2 vols.), Macmillan Co.; Van Dyke, John, *How to Judge a Picture;* Caffin, *A Child's Guide to Pictures;* Ward, *What is English?* Scott, Foresman; Leonard, *English Composition as a Social Problem*, Houghton, Mifflin; Sheridan, *Speaking and Writing*, Sanborn & Co.; Mahoney, *Standards in English*, World Book Co.; Driggs, *Live Language Lessons*, University Publishing Co.

SIXTH GRADE

Read frequently "Suggestions for the Teaching of Composition and Grammar," pp. 111-128.

COMPOSITION

I. ORAL COMPOSITION

1. One-minute talk upon current events.
2. Short debates.
3. Arguments on school subject matter.
4. Discussing a book that has been read.
5. Organizing a school club.
6. Telling jokes (that happen in the school).
7. Discussing newspaper cartoons.
8. Preparing to dramatize a story.

WRITTEN COMPOSITION

1. Original fables.
2. Write up jokes that happen in class-rooms.
3. Rewrite a story from another point of view.
4. Complete stories.
5. Compose stories.
6. Compose poems (imitation of some author's style).
7. Interpret poems.

NOTE: As this new reprint of the course of study goes to press (1918) it seems only fair to ourselves to state that for a year the teachers of all the grades in the County have been revising the work in composition, by means of an intensive study, through committees of inventories, minimum essentials, standards for promotion, and the project and problem method. The results of the work of these committees will not be ready for publication until 1919.

We have therefore omitted from this form details of:

(1) Formal grammar.
(2) Punctuation and pronunciation.
(3) Correct verb forms.
(4) Word and phrase study.
(5) Sentence study.

In all formal grammar work the teacher must bear in mind the functioning of each part of speech, its part in oral language, its part in written composition. Just how far each part of speech aids language has been worked out by one of our teachers as follows:

HOW PARTS OF SPEECH FUNCTION

Noun:

a. For more accurate capitalization.
b. For correct plural forms in both written and oral work.

Pronoun:

a. For less clumsy construction.
b. For correct number form.
c. For correct person.
d. For correct gender.
e. For agreement with antecedent.

Verb:

a. For correct time.
b. For agreement with subject.
c. For use of correct verb form.

Adjective:

a. For enrichment of language.
b. For better construction and arrangement.
c. For correct comparison.

Adverb:

a. For better construction and arrangement.
b. For use as a verb modifier.
c. For correct comparison.

Preposition:

a. For better construction and close relationship of the modifying elements in the sentence.

Conjunction:

a. For richer and more varied construction.

Attainment in English at the end of the sixth school year: See pp. 107-108, The Fourteenth Year Book of the National Society for the Study of Education, Part I. *Minimum Essentials in the Elementary School Subjects:*

1. "To express clearly and consecutively, either in speech or in writing, ideas which are entirely familiar to them.
2. "To avoid, either in speech or in writing, gross incorrectness of grammar.
3. "To compose and mail a letter, using a form acceptable for general purposes.
4. "To spell the vocabulary which they (the pupils) commonly write and to make sure of new or doubtful words.
5. "To read silently and after one reading to reproduce the substance of a simple story, news item, or lesson.
6. "To read aloud intelligibly news items from the school paper, lessons from the text books being used, or literature of such difficulty as 'Paul Revere's Ride,' or Dickens' 'Christmas Carol.'
7. "To quote accurately and understandingly several short poems.
8. "To make intelligent use of ordinary reference books."

TEXT: (Woodley, *Foundation Lessons in English*, Book Two, Part I, pp. 1–122 If the new text has not been supplied); Hosic and Hooper, Book I. New text.

REFERENCES: Carpenter, Baker and Scott, *The Teaching of English*, Longmans; Chubb, *The Teaching of English*, Macmillan Co.; Huntington, *Elementary English Composition*, Macmillan Co.; Briggs and McKinney, *A First Book in Composition*, Ginn & Co.; Briggs, *Laboratory Manual of Letters*, Ginn & Co.; *Children's Letters* (Letters to children), Hinds, Noble, and Eldredge; Heydrick, *Short Studies in Composition*, Hinds, Noble and Eldredge; Van Dyke, John, *How to Judge a Picture;* Caffin, *A Child's Guide to Pictures*; Wilson, *Picture Study* (2 vols.), Macmillan Co.; Bolenius, *The Teaching of Oral English*, Lippincott; Ward, *What is English?* Scott, Foresman; Leonard, *English Composition as a Social Problem*, Houghton, Mifflin; Sheridan, *Speaking and Writing*, Sanborn & Co.; Mahoney, *Standards in English*, World Book Co.; Driggs, *Live Language Lessons*, University Publishing Co.

SEVENTH GRADE

Read frequently "Suggestions for the Teaching of Composition and Grammar in the Grammar Grades," pp. 111-128.

COMPOSITION

I. ORAL COMPOSITION

1. One minute talks upon current events.
2. Short debates.
3. Arguments on school subject-matter.
4. Discussing a book that has been read.
5. Organizing a school club.
6. Telling jokes (that happen in school).

7. Discussing newspaper cartoons.
8. Preparing to dramatize a story.

II. Written Composition

1. Original fables and fairy tales.
2. Write up jokes that happen in the classroom.
3. Rewrite a story from another point of view.
4. Complete stories.
5. Compose stories.
6. Compose poems (imitation of some author's style).
7. Tell personal experiences.
8. Interpret poems.
9. Write letters.
10. Tell how to do things—cook, play games, etc.
11. Study pictures.
12. Write a play.

Note: As this reprint of the course of study goes to press (1918) it seems only fair to ourselves to state that for a year the teachers of all the grades in the County have been revising the work in composition, by means of an intensive study, through committees, of inventories, minimum essentials, standards of promotion, and the project and problem method. The results of the work of these committees will not be ready for publication until 1919.

FORMAL GRAMMAR

The following outline will serve as a guide to the order of sequence that should be followed when reviewing the work of the Sixth Grade and carrying it on to complete the Seventh Grade requirement:

1. *Sentence:*
   Defined; modal classification—declarative, imperative, interrogative.
2. *Sentence divided into its two major parts:*
   Complete subject; complete predicate.
3. *Subject:*
   a. bare or simple; b. modifiers of; this leads to recognition of noun, pronoun, infinitive, adjective and participle as parts of speech; the adjective modifier may be either one word or a group of words (phrase or clause).
4. *Predicate:*
   a. bare or simple, b. modifiers of; this leads to the recognition of verb, complement, adverbial modifiers (word, phrase or clause) and participle.

5. *Complement:*

a. object, b. attribute (objective comp'ement may be omitted); this leads to the identification of predicate noun and predicate adjective as attribute complements.

6. *Further study of the noun:*

Use of the noun in a sentence as an appositive; term of address (omit nominative absolute); exclamation; classification of noun —common, proper, collective; inflection—gender, number, case.

7. *Adjective:*

(Word, phrase or clause) recognition in any part of the sentence

8. *Further study of verb:*

Classified as transitive or intransitive; regular or irregular (correct language forms help here and the rational use of the forms for present time, past time, and future time). The study of conjugation (as such) should not be taught in this grade but should be reserved for the eighth grade if taught at all.

9. *Adverb:*

(Word, phrase or clause) recognition.

10. *Preposition:*

The immediate outgrowth from the study of phrases that are used either as adjectives or adverbs.

11. *Connectives or conjunctions:*

This should lead to the structural classification of sentences.

12 *Classification of sentences according to structure:*

Simple, complex, compound.

TEXT: Woodley; *Foundation Lessons in English*, Book Two, Part II, pp. 123-269 (If the new text has not been supplied); Hosic and Hooper, Book II.

REFERENCES: Carpenter, Baker and Scott, *The Teaching of English*, Longmans; Chubb, *The Teaching of English*, Macmillan Co.; Briggs and McKinney, *A First Book in English Composition*, Ginn & Co.; Briggs, *Laboratory Manual of Letters*, Ginn & Co.; Mead, *The English Language and Its Grammar*, Silver, Burdett & Co.; Bolenius, *The Teaching of Oral English*, Lippincott; Huntington, *Elementary English Composition*, Macmillan Co.; Van Dyke, John, *How to Judge a Picture;* Caffin, *A Child's Guide to Pictures;* Wilson, *Picture Study* (2 vols.), Macmillan Co.; Ward, *What is English?* Scott, Foresman; Leonard, *English Composition as a Social Problem*, Houghton, Mifflin; Sheridan, *Speaking and Writing*, Sanborn & Co.; Mahoney, *Standards in English*, World Book Co.; Driggs, *Live Language Lessons*, University Publishing Co.

EIGHTH GRADE

Read frequently "Suggestions for the Teaching of Composition and Grammar in the Grammar Grades," pp. 111-128.

COMPOSITION

I. Oral Composition

1. One minute talks upon current events.
2. Short debates.
3. Arguments on school subject-matter.
4. Discussing a book that has been read.
5. Organizing a school club.
6. Telling jokes (that happen in school)
7. Discussing newspaper cartoons.
8. Preparing to dramatize a story.

II. Written Composition

1. Original fables and fairy tales.
2. Write up jokes that happen in the classroom.
3. Rewrite a story from another point of view.
4. Complete stories
5. Compose stories.
6. Compose poems (imitation of some author's style).
7. Tell personal experiences.
8. Interpret poems.
9. Write letters.
10. Tell how to do things—cook, play games, etc.
11. Study pictures.
12. Write a play.

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FORMAL GRAMMAR

Note: The following outline was prepared by Miss Mary J. Watson, of the Towson High School and adopted by the committee as a working basis for the eighth grade course:

I. The Sentence

(The work outlined under this topic should cover a period of six weeks at least.)

1. Definition:

   Develop the definition through a discussion that should lead to revising the definition given in the text.

2. Modal classification:

a. Drill in recognition of the declarative, interrogative imperative and exclamatory sentence.

b. Definitions.

3. Subject and predicate:

a. Formulation of definitions by the pupils of the class.

b. Drill in separation of simple and complex sentences into subject and predicate, as follows:

The mild balmy days of autumn | are enjoyed by every one. Do | you | know why the leaves fall in autumn?

The maples which today are all aflame | will soon be bare.

4. Bare or simple subject:

a. The essential word or group of words in the subject. Drill for the recognition of bare subject by eliminating all limiting or modifying elements in the subject.

Illus. (The) *song* (which we sang this morning), (The Star-Spangled Banner), | is our national anthem.

b. The bare subject is always a noun, or its equivalent: pronoun, infinitive, group of words used as a noun.

Drill in the use of the infinitive, and groups of words (phrases and clauses) as equivalents for the noun as bare subject.

Formulate definitions for the noun, pronoun, and infinitive.

5. Classification of words or groups of words limiting the bare subject:

a. Adjective modifiers.

b. Appositives.

c. Possessives.

Drills in the recognition of the participle as an adjective modifier, and of the appositive as an explanatory word or groups of words.

Formulate definitions for the adjective, participle, and appositive.

6. Bare predicate:

Definition:

a. The essential word or group of words in the predicate, or the predicate stripped of all limiting elements.

Drill for recognition of the bare predicate by eliminating all limiting words or groups of words in the predicate.

Illustration:

(1) Some one | has called (the) stars (the) daisies (of the night).
(2) I feel tired (tonight).
(3) His sister | was called (his) (best) friend.
(4) He | is growing (taller) (every) (day).
(5) He | named (the) (eldest) daughter Elizabeth.
(6) She | looks sorry for me.
(7) (Why) do | you | turn pale?

(Underscored words form bare predicate.)

c. The predicate verb is the essential part of the bare predicate.

d. The word or words which together with the predicate verb form the bare predicate of a sentence are complements of the verb.

Drill for recognition of the predicate verb and its complements.

Illustration:

(1) The child | gave me (a) (beautiful) rose.
(2) You | get angry (very) (easily).
(3) They | made (a) stranger (the) leader (of the band).
(Doubly underscored words are the complements.)

7. Review:
   a. Drill thoroughly in the separation of sentences into the parts so far considered.
   b. Drill in the construction of sentences which shall contain all the parts so far considered:
8. Predicate verb:
   a. Sentence drill for recognition of the usages of the verb.
   b. Transitive and intransitive verbs.

NOTE: Emphasize the fact that the receiver of the action expressed by the transitive verb is sometimes named by a *complement* of the verb and sometimes by the *subject.* Classify verbs in the former case as verbs of *active form;* and in the latter, as verbs of *passive form.*

   c. Copulas and copulative verbs.
   d. Predicate nouns and predicate adjectives.

II. COMPLEMENTS

(The work outlined under this topic of "Complements" should cover a period of six weeks at least.)

1. Attribute complement:
   a. Develop the fact that in sentences containing copulas or copulative verbs, the verb complement explains or describes the subject, and is therefore identical with the predicate noun and predicate adjective.
   b. Develop the fact that some verbs in the passive form have complements which explain or describe the subject.
   c. Definition—An attribute complement explains or describes the subject of the verb whose meaning it completes.
   d. Through sentences containing attribute complements of varied construction develop the following generalization:

An attribute complement may be a noun, pronoun, infinitive, adjective, participle or a group of words used as a noun or an adjective.

Illustration:

(1) Glass is brittle.
(2) The price of wisdom is above rubies.
(3) Lead is a metal.
(4) He seems a gentleman.
(5) Giving to the poor is lending to the Lord.
(6) He is to go home.

2. Object complement:
   a. Drill in recognition of the object of the transitive verb.
   b. Class the object as object complement.

Develop the fact that the object complement may be a noun, pronoun, infinitive or a group of words used as a noun.

Illustration:

(1) I ate an apple.
(2) They wished to see me play.

(3) I saw how he did it.

(4) The child loves to play.

d. In sentences containing transitive verbs with direct objects, drill for recognition of the bare predicate.

e. Develop the use of the indirect object and the bare predicate.

To tell to or for whom or what the action expressed by the verb is performed.

To form with the prepositions *to*, *for* or *of*, understood, an adverbial modifier of the predicate verb.

NOTE: The indirect object is not classed as a complement by compilers of texts, but its name and indirect object relation would seem to justify considering it part of the bare predicate and classing it as indirect-object complement.

f. Drill thoroughly in recognition of the object complement and indirect object.

3. Objective complement:

a. Drill for the recognition of the bare predicate in sentences containing an objective complement.

Illustration—We | can (not) pump (the) ocean dry.

b. Show that the verb in the bare predicate does not of itself express the action which falls upon the object complement.

c. Class as objective complement the word or words which help the verb express the action which falls upon the object complement.

d. Show that the objective complement is also used to explain or describe the object complement, and is, therefore, used either as an adjective or noun.

e. Definition—The objective complement helps the verb to express action, and is an attribute to the object complement.

f. Drill for recognition of objective complement

Illustration:

a. They called the child Mary.
b. The boys chose Tom captain.
c. The man painted the house red.
d. You cannot pump the ocean dry.
e. The mother rocked her child to sleep.
f. The general commanded his men to shoulder arms.
g. Some one has called the stars the daisies of the night.

4. Predicate modifiers:

a. Modifiers of predicate verb:

1. Adverbs.
2. Words or groups of words used as adverbs.

b. Modifiers of complements:

1. Adjective modifiers, or modifiers of noun complements.

Illustration—John Adams was (the) (second) president (of the United States).

c. Adverbial modifiers, or modifiers, of adjective complements.

Illustration—The flower is (very) beautiful.

d. Possessive modifiers.

Illustration—To draw true beauty shows a (master's) hand.

The Turks called (their) ruler a sultan.

5. Modifiers of modifiers in both subject and predicate are either adjective or adverbial.

6. Phrases and clauses:

Class summary of the uses of the groups of related words in a sentence.

a. Subject:

Illustration—Where he is | is not known.

b. Complement.

Illustration—Life | is what we make it.

The man | told the boy to do the work.

I | do not know when he came.

c. Adjective modifiers.

d. Adverbial modifiers.

e. Appositives.

Illustration—The popular idea that water is purified by freezing | is a mistake.

III. Summary Conclusion

1. The groups of related words found in sentences are used as adjectives, adverbs, or nouns.

2. Groups of words containing a subject and predicate and having the use in a sentence of a single word are called clauses.

3. Clauses are classified as follows:

Adjective.

Adverbial.

Noun or substantive.

4. Groups of words not containing a subject and predicate and having the use in a sentence of a single word, are called phrases.

5. Classification of phrases:

a. According to use:

Adjective, adverbial, noun or substantive.

b. According to form:

Prepositional—The flower grew by the wayside.

Participial—The flower dropping its petals is a rose.

Infinitive—I want to do my work

IV. Classification of Sentences According to Form

1. Sentence drill for recognition of the following differences in the form of sentences:

a. Some sentences contain but one subject and one predicate, neither of which contains a clause.

b. Some sentences contain but one subject and one predicate, either of which may contain one or more clauses.

c. Some sentences contain two or more sentences, any one of which may contain one or more clauses.

2. Develop definitions of the simple, complex, compound sentence and compare with the definitions given in accessible texts.

V. Connectives

1. Subordinate conjunctions, conjunctive adverbs and relative pronouns are used to connect the clauses of complex sentences with the words which they modify.

Drill for recognition of character of the above connectives, and formulate definitions.

Intensive study of the relative pronoun.

a. Its threefold use in the complex sentence—substitute for the noun, connective, subject or object in the clause which it connects.

b Identification of *who*, *which*, *what* and *that* as relative pronouns.

c. Drill in the usage of *who* to refer to persons, *which* to refer to animals and things, *that* to refer to persons and things.

2. Co-ordinate conjunctions, so called because they join parts of co-ordinate or equal ranks, are used to connect the sentences which form a compound sentence.

Drill for the use of the proper conjunction in the construction of compound sentences.

Illustration—John is a student, but Tom is not. (Correct.)

John is a student, while Tom is not. (Incorrect.)

VI. Line Analysis of Simple, Complex and Compound Sentences

VII. Independent Elements

1. Independent elements like expletives should be set apart before analyzing the sentence.
2. Drill for recognition of independent elements; terms of address, parenthetical expressions, exclamations.

VIII. Case

1. The relation of a noun or a pronoun in a sentence.
2. Cases—nominative, possessive, and objective—and the relationship which they express.

IX. Gender

1. The form of a noun or pronoun that denotes sex.
2. Masculine and feminine.
3. Ways of distinguishing gender.
4. Use of the masculine pronoun to refer individually to a group of persons of both sexes.
5. Personification.

X. Number

1. Definitions: number, singular number, plural number.
2. Rules for forming the plural of nouns in general.
3. Plurals of compound nouns.
4. Plurals of letters, figures, and signs.
5. Plural forms of the pronouns, simple and compound.

XI. Further Study of Nouns

1. Classification: common, proper, collective.
2. All the uses of a noun in a sentence.
3. Drill in determining gender, number, and case of nouns in all possible construction.

XII. Further Study of Pronouns

1. Classification—personal, simple and compound; relative; interrogative; demonstrative; indefinite.
2. Drill for distinction in the use of the demonstrative pronoun and the demonstrative adjective.
3. Declension.
4. Drill in determining the gender, person, number, and case of pronouns.

XIII. Further Study of the Adjective

1. Classification—qualitative; demonstrative.
2. Comparison.

XIV. Further Study of Adverb

1. Uses:
   a. To modify a verb, adjective, or adverb.
   b. To denote time, place, manner, degree, cause.
   c. To affirm or deny.
   d. As a connective.
2. Comparison.

XV. Preposition

1. Uses:
   a. With a noun or pronoun to form an adjective, adverbial, and, in rare instances, a noun clause.
   b. With a verb. Example: He overcame us. He drew up a legal document.
   c. To form the split infinitive.
   d. In pairs; as, *out of, in regard to.*

XVI. Further Study of the Verb

1. Classification:
   a. According to use: transitive, intransitive, copulative.
   b According to form—weak and strong.
   c. Auxiliary or helping verbs.
2. Tense—present, past, future, present perfect, past perfect, future perfect.
3. Dril in the use of *shall* and *will, may* and *can,* as auxiliaries.
4. Principal parts of verbs whose tense forms are most likely to be used incorrectly by pupils.
5. Rules for the agreement of the verb with its subject.

Text: Briggs and McKinney: *A First Book in Composition.*

References: Chubb, *The Teaching of English,* Macmillan Co.; Carpenter, Baker and Scott, *The Teaching of English,* Longmans; Webster, *English for Business,* Newson; Sheridan, *Speakin and Writing,* Sanborn & Co.; Ward, *What is English?* Scott, Foresman; Leonard, *English Composition as a Social Problem,* Houghton, Mifflin; Mahoney, *Standards in English,* World Book Co.; Briggs, *Laboratory Manual of Letters,* Ginn & Co.; Huntington, *Elementary English Composition,* Macmillan; Mead, *The English Language and Its Grammar,* Silver, Burdett & Co.; Hill, *Principles of Rhetoric;* Bolenius, *The Teaching of Oral English,* Lippincott.

SPELLING: PRIMARY GRADES

THIRD GRADE

Introduction. Much attention and thought has been given to spelling in the last few years, and tests have shown that intensive work of a very definite kind should be done in the third and fourth grades. It is an economy of time to teach children how to study. Close concentration is demanded in the preceding grades and needs to be continued to establish a habit which insures correct recall. The spelling ability of children of this age determines our choice of words. Fewer words are chosen and these should be well-taught. Not more than eight words daily and half of those review words previously given, and a still smaller number when the words are difficult, will yield better results. Good habits of spelling are established by much reading, seeing the word correctly, by knowing what the word means, by learning to be annoyed or satisfied with the appearance of a word.

There are three lists from which words should be selected, viz., a class list, consisting of words needed in written composition; an individual list, words commonly misspelled; the grade list, words which may be considered the common stock of words of the grade. Some of the words of the first list would necessarily be transient; words selected from the second and third lists should comprise those which become a permanent possession. About three hundred words should be added to the permanent vocabulary by the end of the third year, giving a pupil entering the fourth grade command of about eight hundred words. The grade spelling list contains the basic words common to the speaking and writing vocabulary. Most of the words with few exceptions are found in the spelling text for the grade, therefore, the children of the third grade should be held responsible for these words.

This, in no sense, interferes with the established practice of the presentation of words in relation to a definite need as occasion demands in written work, or in exercises for special drill. Word collections based upon phonic and other criteria, word building, and dictionary making are emphasized and extended from previous grades. Spelling lists for the grade, and the Alexander Spelling Book need to be used regularly in both oral and written work, as a means for testing the children's spelling ability.

Types of Lessons. Lessons in spelling consist of two types: study, and testing or dictation; and in this grade both can usually be accomplished in the same lesson. The aim is to train the pupil in habits of economical study, and to provide opportunity for further drill and tests in the use of words in independent written language work. While written spelling should receive most attention yet oral spelling need not be neglected since the pronunciation of the word, and naming of letters in order, observing the break at the end of the syllable aids in enunciation and retentiveness. Each child has the opportunity in oral spelling to hear the word repeated by members of the class which also tends to fix the word form in memory. At least five minutes daily should be devoted to rapid, snappy, oral spelling around the class, supplementing written work.

The school affo ds many opportunities to socialize and standardize the work through class and interschool contests, through tests for a definite purpose, as the Ayres and Buckingham Tests, and through a record of the progress of the class shown in some graphic form.

REFERENCES: Ayres. *A Measuring Scale for Ability in Spelling;* Buckingham, *Spelling Ability: Its Measurements and Distribution,* Teachers College Publications; Eldredge, *Six Thousand Common English Words;* Jones, *The Child's Own Spelling Book.*

Time allotment: 15 minutes per day; 75 minutes per week.

Material:

1. Alexander Speller, Book One. Select lessons according to daily needs. Assign lessons for five mniute daily oral drill from the text. Complete the text. Pupils held responsible for 300 basic words.
2. Words selected from history, geography, nature, literature, as needed for purposes of written language:
   a. Words needed in written language;
   b. Word collections, phonetic and other criteria;
   c. Word making, using suffixes and prefixes;
   d. Words requiring special drill.

Method:

STUDY LESSON

1. Directed study.

   a. Study a word by a word whole. Proceed as in previous grade: write one of the words on the board, pronounce, give meaning often by use in a sentence, erase, and have children write and spell orally. Continue until all words are given.

   b. Train in discovery of difficulties by classification of eye and ear words. Some words require little or no study. Concentrate on parts of words which do. Oral and written work.

c. Train in syllabication. Call on pupils to spell by syllables.

d. After the various words of the day's lesson have been studied in this way, give a few moments for studying again the whole list, asking children to concentrate upon the words most difficult for them. Rapid oral spelling around the class, followed by dictation for written work.

2. Seat study:

a. Follow the same general lines indicated above.

b. Teach the pupil to study the word, close the book or cover the word with a slip of paper, and test his retention, then compare with the text. Continue until all words have been mastered. Some words require little study, others more. Train pupils to find eye and ear words, and to make helpful associations.

c. Make word collections or associations according to various criteria, as sound, pictures, objects, stories in history, geography, nature. Correct lists of these words should be kept for reference.

d. Practice word making or word building, using a root word as a basis for word associations, keeping within the comprehension of the child.

Dictation or Testing Lessons

1. Words studied under supervision or as seatwork should be recalled immediately by means of an oral or written test, repeated the following day, a week later, a month later, in oral or written work. Frequency and recency of recall insures the retention of the correct word form in memory.

a. Column test:

Words should be dictated by teacher; words recalled in order by children unaided by teacher; words used orally in sentences, soon to be embodied in a paragraph.

b. Phrases:

Place emphasis upon the meaning and appearance of the word in the related group of words. Valuable drill.

c. Sentences:

The use and appearance of words should be emphasized, but the isolated sentence, usually meaningless, violates good language habits. The sentences, therefore, should always be related to a central theme. After children are familiar with the paragraph through dictation, and the words have been used in oral construction an independent paragraph using words indicated, may be attempted.

d. Oral: five minute daily drill upon words commonly misspelled.

2. The true test of spelling ability is found in the correct response made automatically under the impulse of thought in written work.

a. Dictation in language exercises emphasizes not only technique but spelling as well. Preparation of words should be given whenever necessary.

b. Independent written work:

The first draft should be carefully scrutinized by the pupil and corrections made of any errors of which he is conscious. Annoyance is felt at the wrong appearance of the word only when the right form is firmly fixed through habit.

Methods of Correcting Spelling

1. The material.

a. Choice of words dependent upon spelling ability. Some words have no place in a third grade pupil's spelling vocabulary.

b. Correct teaching of the varying types of words. Teaching words which seem easy, yet are constantly recurring in wrong form.

c. Improvement in pronunciation, articulation, enunciation.

2. Recognition of types of errors.

a. Substitution.

b. Illegibility.

c. Omission.

3. Remedial work:

a. Correct form given for comparison, and corrections made by the individual.

b. Lists made of words commonly misspelled and used as a check and corrective by pupil.

c. Improvement in writing.

d. Daily, weekly, monthly review of those words which apparently are most difficult. Each succeeding day at least two words from the previous lesson should appear again.

Socializing the Lessons

1. Word games of a competitive nature, oral and written.

2. Spelling contests in classes and between classes of a school, and representatives of schools.

3. Time tests.

4. Standard tests; Buckingham; Ayres.

FOURTH GRADE

Introduction. Fourth grade spelling is the stage when the mastery of mechanical skill brings real enjoyment to children. Extensive abstract work in the fundamental processes in arithmetic, memorizing of prose and poetry, and an increasing accumulation of words, are in no wise irksome. Spelling may, therefore, receive greater emphasis in this grade since the children seem to eat up words with avidity. There is a marked advance over third grade children in spelling ability. This was shown in the Buckingham tests; the median for the third grade in Baltimore County was 50 per cent., while for the fourth grade the median was 76 per cent., a remarkable increase in power, nearly three times that shown in any other grade.

The increased spelling ability of children in this grade demands, (1) a judicious *choice of words*, determined by the needs of the pupils in their written work, since we learn to spell in order to write correctly, (2) a method of procedure which insures that the word form is clearly defined in the pupil's minds; (3) and that the stress be placed upon written spelling rather than oral.

To establish correct habits association must be made with correct spelling. Incidentally much reading tends to impress the word forms; linking the meaning with the word helps to fix its form, and the feeling of annoyance or satisfaction which the appearance of a word may bring helps to establish its identity.

The choice of words. In each grade words are chosen to meet the needs of the class; a definite grade list of the common stock or basic words, including words requiring special drill or those commonly misspelled; a class list of words used in relation to history, literature, nature, geography and an individual list, consisting of those words which need personal attention. Wherever advisable spelling books or dictionaries are kept for purposes of review. In this, as well as the previous grade a spelling text is placed in the hands of the pupils. It contains the 500 basic words in addition to those previously given for which fourth grade children are held responsible. At the end of the fourth year pupils should have a spelling vocabulary of about twelve hundred words.

Method of procedure. Few words well chosen and well taught yield best results. Not more than ten words should be given daily, and half of those review words previously given, and requiring added drill. In attempting to master a word form, attention should be centered upon one word at a time, followed by compari-

sons of existing likenesses and differences in word associations. Pupils should be trained to examine a new word closely with a view to finding and mastering the difficulties that it may present, and should be trained to link the meaning with the sound and letter translations. Training children to study economically and effectively is the purpose of the study lessons in this and the preceding grades. For this reason ear, eye, and muscular or motor appeals are constantly made. Writing is one of the best means, since the muscular impression helps to fix the word in the memory. Written spelling emphasizes the use of the word as it will be used in everyday experience, but because we seldom make lists of words, column testing is less valuable than words used in phrases, sentence, or the paragraph. Emphasis should therefore be placed upon the use of words in connected composition units, as exemplified in the short paragraph.

Oral spelling should not be neglected, since it materially aids recall by naming of letters in regular order, by syllabication, and by giving opportunity for pronunciation. All the pupils are active in hearing the word spelled which is not true in written spelling. Five minutes daily should be devoted to oral spelling, aside from the occasional oral work done in connection with written spelling.

Lessons consist of two types, as in preceding grades; the study spelling and the dictation or testing. Often both can be accomplished in the same lesson, but all study lessons should lead to economical habits of study in undirected seatwork.

The school affords many opportunities to socialize and standardize the work through class and interschool contests, through tests for a definite purpose, as the Ayres and Buckingham Tests, and through a record of the progress of the class shown in some graphic form.

REFERENCES: Ayres, *A Measuring Scale for Ability in Spelling;* Buckingham, *Spelling Ability, Its Measurement and Distribution;* Eldredge, *Six Thousand Common English Words;* Jones, *The Child's Own Spelling Book.*

Time allotment: 15 minutes per day; 75 minutes per week.

Material:

1. Alexander Speller, Book One. Select lessons according to daily needs. Assign lessons for five minutes' daily oral drill from the text. Complete the text. Pupils held responsible for 500 basic words.

2. Words selected from history, geography, nature, literature, as needed for purposes of written language.

Method:

Study lessons.

1. Directed study.

a. Pronounce the word. Study it by the word whole written upon the board.

b. Discuss and concentrate upon difficulties. Divide into syllables.

c. Develop meaning; find a synonym or use in a sentence.

d. Spell orally and write.

e. Continue until all the words have been given. Give a brief time for concentrated study of the whole list. Erase, and dictate, or have pupils make independent recall unaided.

2. Seat Study.

a. Follow the same general lines indicated above.

b. Teach the pupil to study the word, close the book or cover the word with a slip of paper, and test his retention, then compare with the text. Continue until all words have been mastered. Some words require little study, others more. Train pupils to find eye and ear words, and to make helpful associations.

c. Make word collections or associations according to various criteria, as sound, pictures, objects, stories in history, geography, nature. Correct lists of these words should be kept for reference.

d. Practice word making or word building, using a root word as a basis for word associations.

Dictation or Testing Lesson

1. Words studied under supervision or as seatwork should be recalled immediately by means of an oral or written test, repeated the following day, a week later, a month later, in oral or written work. Frequency and recency of recall insures the retention of the correct word form in memory.

a. Column Test.

Words should be dictated by teacher; words recalled in order by children unaided by teacher; words used orally in sentences, soon to be embodied in a paragraph.

b. Phrases.

Place emphasis upon the meaning and its appearance in the group of words. Valuable drill.

c. Sentences.

The use and appearance of words should be emphasized, but the isolated sentence, usually meaningless, violates good language habits. The sentences, therefore, should always be related to a central theme.

d. The Paragraph.

Words chosen with reference to a subject afford opportunity

for the use of the words in coherent, related sentences. Check certain words from the column list, which the teacher weaves into an oral composition and dictates to the class. Members of the class are called to make oral compositions, one short paragraph in length. When sufficient skill has been attained in seeing the words of the spelling dictation in relation to a simple theme, independent written work, consisting of one short paragraph should be given as a test of word retention.

2. The true test of spelling ability is found in the correct response made automatically under the impulse of thought in written work.

a. Dictation in language exercises emphasizes not only technique but spelling as well. Preparation of words should be given whenever necessary.

b. Independent written work.

The first draft should be carefully scrutinized by the pupil and corrections made of any errors of which he is conscious. Annoyance is felt at the wrong appearance of the word only when the right form is firmly fixed through habit.

Methods of Correcting Spelling

1. The Material.

a. Choice of words dependent upon spelling ability. Some words have no place in a fourth grade pupil's spelling vocabulary.

b. Correct teaching of the varying types of words. Teaching words which seem easy, yet are constantly recurring in wrong form.

c. Improvement in pronunciation, articulation, enunciation.

2. Recognition of types of errors.

a. Substitution.

b. Illegibility.

c. Omission.

3. Remedial work.

a. Correct form given for comparison, and correction made by the individual.

b. Lists made of words commonly misspelled and used as a check and corrective by pupil.

c. Improvement in writing.

d. Daily, weekly, monthly review of those words which apparently are most difficult. Each succeeding day at least two words from the previous lesson should appear again.

Socializing the Lessons

1. Word games of a competitive nature, oral and written.
2. Spelling contests in classes and between classes of a school, and representatives of schools.
3. Time tests.
4. Standard tests: Buckingham; Ayres.

SPELLING: GRAMMAR GRADES

SUGGESTIONS FOR TEACHING SPELLING IN THE GRAMMAR GRADES

Material. Material for spelling should be gathered from the daily lessons in reading, history, geography, arithmetic, industrial arts, music and drawing—and from the speller for the grade. The lists in the speller should seldom be used as printed in the book, but should be made the basis for the selection of words adapted to the experiences of the child of the grade, some words being discarded altogether.

A daily lesson might contain either visual or oral spelling; visual and written dictation; written and oral; or all three; and the lessons in the main should be spelling lessons studied with the children. Too much of our work in spelling in the past has been testing spelling. Now we must teach children how to acquire habits of studying spelling. Study habits vary with individuals: the teacher must supply enough study devices to take care of each child's peculiar predisposition: "earmindedness," "eyemindedness," "muscular mindedness" (writing and inner speech). Besides this she must call attention to the several ways in which a single word may be misspelled. She must make children see words in relations, and word-building is necessary for this. In fact, the teacher should spend about four-fifths of the time studying spelling with her pupils and one-fifth of the time testing them.

Let the spelling period be devoted to spelling, *not language.* This error on the part of the teacher has come from realizing the aid the content meaning of the word gives to the correct spelling of the word. Selecting words from lessons where the use and meaning of the word are known will obviate this difficulty.

Drill the pupil thoroughly in his own misspelled words.

Text: Alexander, Book II.

Time-cost. The daily lesson period should not exceed fifteen minutes. The teacher will remember that the acquiring of spelling facility is in relation to the general progress of the class, and that much of the child's time both in and out of school is spent in reading and writing which fix his spelling habit. The progress in spelling, other things being equal, is dependent upon "the personal efficiency of the teacher."

Factors Involved in the Study of Spelling

The main factors involved in the subject we call *spelling* are gathered together in the following outline. The phases presented should be understood by all teachers. A number of the important ideas here presented, are derived from lectures given by Prof. E. L. Thorndike, of Teachers College, Columbia University, on the "Psychology of the Elementary School Subjects" (1913).

I. Study Spelling

1. Directed study lesson.
2. Child's plan for study.
3. Oral study lesson.
4. Written study lesson.

II. Suggested Directed Study Lessons.

(Baltimore County alone is responsible for the ideas put forth in these study lessons.)

The words may be chosen from textbook lists, or from the daily subject matter. In either case the class must have had some experience with the word before it becomes a subject for the spelling lesson:

Procedure A:

1. The teacher pronounces the word.
2. Children identify it as one, two, or three syllable word.
3. Proceed thus with all the words in the list.
4. Pupils (individually) then dictate the same words, emphasizing syllabication, while a number of pupils write them on the board.
5. The teacher culls out the incorrectly spelled words in the board lists and proceeds to study them with the class after writing them correctly on the board.
6. The pupils tell how they misspelled the words.
7. They mark the difficulties.
8. They syllabicate the words.
9. They mark the accented syllable if the pronunciation has been difficult.
10. The teacher erases the list and the pupils write rapidly as many words from the list as they can remember (many children at boards; all at seats writing, too).
11. The teacher again marks for words misspelled.
12. Each child then writes his own misspelled words in his notebook. (The teacher records all the misspelled words in her notebook.)
13. The class then writes the words in original sentences, or the teacher dictates sentences.
14. For home study the children may choose a topic around which the words can be grouped and write a short paragraph containing as many words as it is possible to incorporate in the content of the paragraph.
15. The next day these paragraphs are discussed in class.

Procedure B:

1. Have a list of words on the board (not more than ten, five old, and five unstudied words). (The content of almost all of the words should be familiar.)
2. The children will beat (by tapping) the syllabication showing the accented syllable by a stronger beat than the other, just as beating time in music is done. Ex. —"removable" would take the beats: weak, strong, weak, weak or — ——— — —.
3. The children (at board and seats) then syllabicate the words, and wherever confusion arises or a mistake is made, the dictionary is consulted.
4. The spelling difficulties in each word are then discussed.

5. The words are erased and spelled orally in syllables, the teacher always requiring that the word shall be pronounced before and after spelling.

6. The teacher dictates sentences containing the words; or the pupils write a paragraph containing the words, after choosing a topic for the paragraph; or the pupils dictate sentences containing the words for the class to write.

7. The teacher and pupils then record the class mistakes and the individual mistakes.

Procedure C:

1. Pupils at boards and seats write a list of familiar words (for five of which the spelling needs to be reviewed and five new words) as the teacher dictates.

2. The teacher marks the board lists for errors and the pupils at seats mark their own lists from the board spelling.

3. The unmissed words are then eliminated and the lesson is concentrated upon the spelling of the incorrectly spelled words in the list.

First, if any reviewed words were missed the teacher flashes these quickly.

The procedure with the new words in this list is to test whether the children know their meanings. Then the lessson will go on in some such way as in Procedures A and B.

III. Dictated Spelling (really a test).

1. Column dictation.
2. Paragraph dictation.
3. Sentence dictation.

IV. Methods of Correcting Errors in Spelling.

1. Avoid the old method of having a child write each word five times or twenty times until he knows it.

2. Let a child correct his errors individually. For instance, one child may want to look at the word, note how he misspelled it, and how it is really spelled, then cover the word with his hand, and write it once only. To reinforce the new impression, he might be told to write several sentences each containing the word to show how it can be used in different contexts.

3. Another child might want some one to hear him spell his words after he had repeated the spelling several times to himself, The hearer might then dictate the original sentences containing the misspelled words, and together the two children might mark the words.

4. Correction of errors should be as individual as the individuals; a correcting lesson is only another form of an individual's study-lesson. Children study as individually as they are made.

V. Socializing Spelling.

1. To socialize spelling see to it that children never send out letters to classmates, business firms, or parents, about anything connected with school work, that have not been edited by several members of the class. If the spelling of any word is disputed the final authority is the dictionary, and all pupils above the third grade should know this.

2. Insist upon correct spelling as far as is practicable in all written work in school.

3. Have the pupils make posters, print signs, write advertisements—telling of some school activities. Make them responsible for handing in correct spelling in these projects if they wish their efforts to be accepted.

4. Clip out advertisements from the daily newspapers, of household, clothing, food, real estate and printing establishment sales, and base the spelling lesson occasionally upon these.

5. Have inter-class and inter-school spelling contests.

6. Work to have children feel dissatisfied with their poor spelling and to feel pleasure when they improve.

VI. Selection of Word Lists for Study.

1. Grade list: the text for the grade gives this.

2. Class list: each teacher makes this from his daily lesson.

3. Individual list: Each child keeps a spelling notebook in which he records the class list, and his own misspelled words.

VII. Standardizing Spelling Ability.

In May, 1914, the Baltimore County Schools were tested by the Buckingham spelling test. The median for our grades is given on p. 154.

References: Buckingham, *Spelling Ability, Its Measurement and Distribution*, Teachers College Publications; Ayres, L. P., *A Measuring Scale for Ability in Spelling*, Russell Sage Foundation.

VIII. What is Spelling Ability?

Spelling ability is a hierarchy of habits like arithmetic, language, reading, and spoken English.

1. The hierarchy of habits in spelling means sound and letter translations linked up with meaning.

2. Seeing a word correctly spelled, as satisfying; or incorrectly spelled, as annoying is one of the habits that is potent as a control for good spelling.

3. Seeing a word in ordinary reading strengthens "1" and "2."

4. An impression that is adequate for a child to get the meaning of a word is not adequate, always, to help him get the spelling. (Varies in individuals.)

5. There is a spelling ability proper as distinguished from informational difficulties. (Hasn't read much, hasn't seen a word often, but spells it.)

6. How shall we establish 1, 2, 3?

a. Association must be made with correct spelling.

b. Meaning is necessary (meaning makes a bond). Where pains are taken about meanings, more attention will be paid to the word itself.

c. The satisfying and annoying feelings haven't been taken into consideration enough.

IX. Some Factors Teachers and Supervisors Should Always Take into Consideration

1. The behavior of words has received practically no attention.

2. Pupils misspell words because their teachers do not realize the need of teaching them.

3. There are various types of words and each type requires a different treatment.

4. There is a type that does not need to be taught at all.

5. There is a type which appears easy in the lower classes and hard in the upper classes. (Such words may have been taught prematurely in the lower grades.)

6. There is a type which appears to possess special difficulty in the middle grades:
who's (due to learning to use the apostrophe).
whose.

7. There are types of errors:
Substitution
Illegibility
Omission

8. Usually all words are taken as equal measures of spelling ability.

Is this true? Try such words as: *disappoint, necessary, changeable, better, because, whose, who's, tomato, pshaw, grease,* and see how many of the words the children in the grade will misspell, and in how many different ways the same word can be misspelled.

9. Do you know how much one grade surpasses another in spelling? The Buckingham Test showed this for Baltimore County when it was given to our schools, May, 1914:

Median for the grades: Third—58 per cent., Fourth—80 per cent., Fifth—86 per cent., Sixth—90 per cent., Seventh—94 per cent., Eighth—96 per cent.

X. MOST WORDS ARE IN SOME WAY SPECIAL.

They are special in ways we do not realize.

1. Very often they do not mean the same thing to one person that they mean to another.
2. The same word is frequently pronounced differently by different people.
3. They suggest dissimilar imagery.
4. They connote variously.
5. They range from very easy to very hard—easy for some, hard for others.
6. There are numerous ways of misspelling them.
7. One error may not be equal to another error in misspelling the same word.

No spelling book has yet appeared based upon a study of how frequently children misspell the words of which it is composed.

Every spelling book contains numerous words that many children know how to spell.

XI. WHAT AFFECTS SPELLING ABILITY?

1. Heredity emphasizes it.
2. It is not closely correlated with arithmetic. Spelling is less intellectual than mathematics.
3. It is not closely correlated with memory. Memory is not a great factor. Some good spellers have poor memories: vice versa.
4. We not do learn spelling once for all. The more we read the more we learn to spell.
5. There is no close relation with visual imagery.
6. There is a close relation between perceiving details and the ability to spell.
7. Reading little, causes poor spelling.
8. Test yourselves:

Think of ten words you are practically certain you have never written. Find out how you spelled them.

What tells you how to spell a word? "It is some relic of perception of the word that tells you how to spell it."

XII. WAYS OF SPELLING.

1. Advantages of oral spelling:

a. The pupil always gets the letters in order. This is not true with the eye only.

b. All the pupils of the class are active in hearing the word spelled. This is not true of written spelling.

c. Oral spelling is connected with pronunciation: (1) pronounce the word, (2) spell it in syllables, (3) pronounce again.

But don't forget that oral spelling needs the bond of writing at the board.

2. Advantages of written spelling:

a. Us ng the word as it will be used in life

b. The printed form helps spelling.

c. The typewriter will aid spelling.

3. Flash spelling:

A word flashed is not a visual image but it gives a percept of the word as a whole.

4. Methods that have not been tried:

a. When a person is reading, stop him, ask him to spell the last word. He cannot; then direct his attention to get the spelling as he reads. (This means literal structure.)

b. Lower grades: Find a word that has the *e* sound; *sh* sound, *ough* sound.

c. Upper grades: Have the pupils think words in parts as they read; be interested in words, their meaning and their history.

XIII. Criticism of Spelling books.

(From Suzallo, *The Improvement of Instruction in Spelling*, Teachers College Publications.)

1. Does the book impose adult standards in the selection of words, and disregard the child's use of them?

2. Are the words taken from dictionaries, or from other school subjects?

3. Are the difficulties measured by the number of syllables? (Words should be classified by their structure or phonetic elements, and their associated meaning or use.)

4. How are the words classified?

5. Are there too many words?

6. Are the list words supplemented by contextual spelling? The lists should grow out of the context.

7. Is the contextual material selected from interesting literary materials?

8. Is there provision for testing spelling?

9. Is there provision for word-analysis?

10. Are spelling rules given? How are they treated?

11. Are pictures used at all?

12. What is wrong with—(a) Pronounce the word; (b) Spell it both by letter and by word: (c) Discuss the meaning; (d) Use the word in a sentence?

It should be re-arranged in this way: (a) Pronounce the word; (b) Use it in a sentence; (c) Discuss the meaning; (d) Spell it both by letter and by word: (e) Pronounce it again.

XIV. Spelling Demons:

Doctor Jones calls the following one hundred words the "One Hundred Spelling Demons of the English Language" because he found that they were the words misspelled in all grades of the elementary school. These words should receive special attention:

always	coming	heard	raise	though
among	cough	here	road	through
any	don't	hear	straight	they
again	does	instead	sugar	to-night
ache	done	just	shoes	truly
answer	dear	knew	said	used

business	doctor	know	says	very
been	every	laid	sure	which
built	easy	lose	since	where
busy	early	loose	some	women
believe	enough	many	seems	write
beginning	friend	meant	separate	writing
blue	February	making	their	would
break	forty	minute	there	Wednesday
buy	grammar	much	Tuesday	wear
can't	guess	none	two	whether
country	hoarse	often	too	whole
could	half	once	trouble	won't
color	having	piece	tear	wrote
choose	hour	ready	tired	week

The "arch-demons" of this list were found by Doctor Jones to be *which*, misspelled 321 times in the 7,500 themes; *their* and *there*, misspelled an aggregate of 612 times for the two, and *separate*, misspelled 283 times.

XV. Aids for Improving the Spelling Ability of Children:

1. Syllabicating, and marking the accented syllable.
2. Word-building.
3. Marking the difficulties in the word
4. Interschool contests.
5. Interclass contests.
6. Better methods of teaching.
7. Incorrect spelling should be corrected in all written work.
8. The kind of drill should vary according to the school population.
9. Patient and efficient use of grade list, class list, and *individual* list.
10. Words in use in school and community environment should be used
11. Avoid lists that bring together words of the same combination: *tion* or *tain* or *ture* or *cious*.
12. Keep homophones apart until association has been set up, then later bring them together for contrast.
13. The dictionary habit is a good habit, and children must be taught to *use* the dictionary and *how to use* the dictionary.

XVI. Rules for Spelling.

Pupils should be taught the importance of the rules for spelling and should be required to learn them *after they have been taught inductively*. All rules and abbreviations taught in one grade should be reviewed in the next higher grade.

All sentences given by pupils as examples illustrating rules should be clear and to the point.

References: Thorndike, *Lectures on the Psychology of the Elementary School Subjects*, Teachers College, 1913; Suzallo, *The Improvement of Instruction in Spelling*, Teachers College Record, Part I, January, 1912; Wallin, J. E. W., *Spelling Efficiency in Relation to Age, Grade, and Sex*, Warwick and York; Cornman, *Spelling in the Elementary Schools*, University of Penn. Studies; Rice, *"The Futility of the Spelling Grind,"* Forum XXIII; Cook, W. A. and O'Shea, M. V., *The Child and His Spelling*, Merrill; Jones, W. Franklin, *The Child's Own Spelling Book*; Buckingham, *Spelling Ability, Its Measurement and Distribution*, Teachers College; Ayres, Leonard P., *Measurement of Ability in Spelling*, Russell Sage Foundation;

Pearson, H. C., *Experimental Studies in the Teaching of Spelling, Part II*, Teachers College Record, January, 1912; Lewis and Holmes, *Knowing and Using Words*. Allyn, Bacon.

Spelling pamphlets that contain interesting data on spelling: Ayres, Leonard P., *The Spelling Vocabularies of Personal and Business Letters*, Russell Sage Foundation, Free; Eldridge, R. C., *Six Thousand Common English Words*, Niagara Falls, N. Y., (10 cents.) Gustave Straubenmuller, Associate Superintendent of Schools, New York City, *Standards of Spelling:* Published by the Association of Men Teachers and Principals, Free. Johnstown, Pennsylvania, Public School (1913), *The Teaching of Spelling*, Free; C. K. Studley and Allison Ware, *Common Essentials in Spelling*, State Normal School, Chico, Calif., 25 cents; R. C. Eldridge, Niagara Falls, N. Y., *Six Thousand English Words, Their Comparative Frequency and What Can be Done with Them*, 10 cents; R. C. Eldridge, Niagara Falls, N. Y., *A Phonetic Alphabet*; Anne Nicholson, *A Speller for the Use of Teachers in California*, San Francisco Printing Office; Worlfolk, Algar, *The Need of Intensive Work in Spellling*. A tentative experiment (Master's Essay, Teachers College) (Unpublished).

GEOGRAPHY: PRIMARY GRADES

THIRD GRADE

The earth is the home of man. He lives upon its surface, he is dependent upon its resources for food, clothing, and shelter, and other related needs. How his physical environment aids or hinders development, and what man has done to modify, adapt, and utilize his physical environment, constitute the subject-matter of geography. Therefore, a study of the earth without considering the life and work of mankind would be dry, meaningless, and un-geographical.

Purpose. The purpose of geography in the primary grades may be said to provide the child, through observation and experience with such fundamental concepts as will be helpful to him in the later grades when he is required to go in imagination to distant regions which lie beyond the horizon of his observation and experience.

Material. Young children are primarily interested in *how* we are fed, clothed, sheltered, transported, and only secondarily in *why* differences exist. Through the study of these related activities as observed in the busy life about them many geographical facts become permanent possessions. Much geographical content is presented in simple fashion in the work of industrial history and nature study of the first and second years which is organized and extended in the third year through two distinct avenues of approach, the first, observational work or out-of-door geography, the second, descriptive or story work, of life in far away lands. By beginning with the near and familiar types of industrial activity together with observations of physical conditions which affect industry, notions are given through which the children may image the remote areas beyond their vision.

Method. The method should consist largely of discussions based upon direct observations gained through excursions, and short field trips to study at close range the various typical features in the immediate environment. A teacher's ingenuity will be taxed to find time for all the necessary excursions, but *short* trips at recess, after school, and near the close of the school day should be planned with care, and occur at regular intervals. Observations in the street after a heavy rain, visits to places by small committees under a competent class-leader, or an older pupil, may be instituted. Oral reports supplemented by crude sketches are valuable. Illustrative

material, consisting of pictures, and interesting suggestive articles, together with blackboard sketches and simple records of facts gained are necessary.

When children have been taught to see physical features and to note the activities of people in the community, then they may *hear* stories about other lands, and lastly, a text may be placed in their hands, as a means to supplement the oral development work. This occurs in the fourth year. Simple supplementary reading material should be used freely by teacher and children in this grade.

Geography books or portfolios, illustrating certain features, as homes, modes of travel, waterways, should be made by the class. Notebooks in which to record the simple outline, the statement of the problem, and the class story, should be kept by each child for purposes of review.

HELPFUL BOOKS

References for Teachers: Dodge and Kirchwey, *The Teaching of Geography;* Frye, *Brooks and Brook Basins;* Dodge, *Home Geography;* Jackman, *Field Work on Nature Study;* Herbertson, *Man and His Work;* Haaran, *First Notions of Geography.*

References for Children: McMorris, *Our Little Dutch Cousins;* McMorris, *Our Little Brown Cousins;* Baldwin, *Old Stories of the East;* Dutton and Mott, *In Field and Pasture;* Perkins, *The Dutch Twins;* Chance, *Little Folks of Many Lands;* George, *The Little Journey Series;* Andrews, *Seven Little Sisters;* Schwartz, *Five Little Strangers;* McDonald and Dalrymple, *Little People Everywhere;* Kirby, *Aunt Martha's Corner Cupboard;* Chamberlain, *How We Are Fed;* Chamberlain, *How We Are Clothed;* Chamberlain, *How We Are Sheltered;* Chamberlain, *How We Travel.*

Time allotment: Geography and history will alternate; two lessons per week in geography and three per week in history. Recitation, 20 minutes per day, 100 per week. Seatwork, 20 minutes per day, 100 per week. Total for geography, 80 minutes per week. Total for history, 120 minutes per week.

Distribution of subjects and time allotment: All through the year at regular intervals observational work on relation of seasonal changes and weather conditions.

September: Seasonal changes.

October: Map of school grounds, and direction and location; symbols. Our homes, groups of homes; plains, hills; city and country.

November: The farm and market.

December: The dairy; trade or exchange; roads.

January: Seasonal changes.

Stories of child-life in other lands: Eskimo, cold land; Gemila, hot, arid region; Bumo and Bu, cold mountain region.

February: Brown Baby, in tropical land; José in Cuba.

March: Life in the Highlands; Jeannette, the Mountain Maiden. Life in the Lowlands; Hans and Gretchen in Holland.

April: Life along the sea-coast; Pierre and Violette in Norway. Seasonal changes. Type forms in the neighborhood.

May: Type forms in the neighborhood; stream, river, ocean.

June: Life in the rain forests; Manenko in Africa.

Home or Out-of-Door Geography

OBSERVATIONAL

I. Seasonal changes:
1. Affecting life of pupil.
2. Affecting occupation of parents.
3. Effect upon animal life.
4. Effect upon plant life.

II. Sun's apparent daily path across sky.

III. Weather conditions:
1. Weather records.

IV. Surface features:
. Type forms of land and water in the neighborhood.
   a. Field trips.
   b. Maps made by teacher of school grounds and vicinity.

V. Occupations and industries of the community:
1. Agriculture.
   a. The farm or market garden.
   b. The dairy.
2. Commerce.
   a. The market.
   b. Transportation: good roads and modes of transportation.
   c. Trade or exchange.

World Geography

DESCRIPTIVE AND PICTORIAL

I. Stories of child-life in other lands:
1. Life in cold lands, Eskimo; frozen desert, Greenland.
2. Life in hot lands.
   a. Dry, hot desert and oasis; Africa. Gemila, the child of the desert.
   b. Hot, rainy regions: Brown baby of Hawaii; Tondo of Philippines; José of Cuba.
3. Life in the highlands.
   a. Semi-arid region: Tibet, Asia. Bumo and Bu of Tibet.
   b. Switzerland, Europe. Jeannette, the mountain maiden.
4. Life in the lowlands: seacoasts of Norway and Holland.
   a. Hans and Gretchen in Holland.
   b. Pierre and Violette in Norway.

Home or Out-of-Door Geography

Fall. OBSERVATIONAL

I. Seasonal changes: Introduction to the study of the seasons; from the opening of school until the autumnal equinox:

1. Several lessons on the relation of changing seasons to the life of the children;

their games in the fall compared with games of other seasons; their food and clothing at different seasons.

2. Effect of changing seasons upon the occupations of people about them: within the home, in garden and field preparatory to approach of winter season. Review and enlarge facts gained in previous year.

3. Effect of changing seasons upon animal life: first what the children already know, then direct observation to discover how animals prepare for winter—thicker fur, storing food, building houses. Migration of birds; what birds stay all winter; what ones migrate; why and where.

4. Effect of changing seasons upon vegetation—first what children already know, then direct keener observation of the effect of seasons upon vegetable life—trees that lose their leaves, evergreen trees, those first to turn red. Dying down of plants; seed making.

II. Observation of the sun's apparent path across the sky: time and direction of sunrise and sunset, length of day and night; noon angle of the sun above the southern horizon on the autumnal equinox. After observations have been made, as the weeks go by, call frequent attention to where the sun is rising, and setting, and where it is at noon, so as to bring out that the days are getting shorter, the nights longer, and the sun's rays more slanting.

III. Weather Conditions:

1. Observation of weather changes; the object is to discover how change in the direction of the wind causes weather changes; what winds give us warm weather with clouds and rain; what winds give us clear or clearing weather with low temperatures; what winds give us the heaviest snowfall. Keep a weather chart, recording daily observations.

2. Weather Records:

Indicate upon a chart made upon the blackboard or manilla paper the following points:

Date: appearance of sky; kind of day; temperature; precipitation; direction of wind.

Summaries are made weekly, monthly, both orally and in writing.

IV. Maps:

1. Introduction to the study of maps; the maps of the schoolroom, school grounds, and later the school district. Be sure in the use of these maps that pupils do not use symbols on the map until they know well the things for which the symbols stand. The children do not need to make the maps, but the teacher should have maps made to scale of schoolroom, school grounds, and regions in the vicinity; to be used freely by children in the location of well-known places. These maps may be made on the blackboard, on manilla paper, or on tracing cloth. Often place map on floor or on large table for map reading with small group of children gathered around it.

REFERENCE: Dodge, *Home Geography*, pp. 36-39.

V. Location and Direction:

1. School-room map.

a. Let the pupils go to the map and point to the symbol for their own seat, teacher's desk, window, and other objects.

b. Let one child walk about the room, and let another indicate on map the course taken.

c. Let them tell from the map the direction of various objects in the room from the teacher's desk.

d. Let the children measure on the map and use the scale to find the distance various objects in the room are from each other.

2. Neighborhood maps:

a. Map of school grounds; of town; of vicinity; use again and again to familiarize children with symbols; link location with direction, with scale.

REFERENCE: Dodge, *Home Geography*, pp. 19-52, 11-13.

VI. Surface Features:

Type forms of land and water in the neighborhood are presented in relation to some industrial activity with which children are already familiar through concrete experience. The study of what man has done to provide himself with food, clothing, and shelter, presented in the previous grade, leads to a study of the geographical aspects of environment. How man has protected himself from weather conditions, seasonal changes, and made use of his environment to secure shelter provides a rational starting point. A study of Our Homes and Where They Are Built may serve as an introduction to surface features of the neighborhood. Then short field trips and directed observations of the landscape as children walk to and from school, and simple map readings tend to fix a few geographical facts upon which all industrial life depends. Introduction to type forms in the neighborhood:

1. Our Homes:
   a. What home means to us; to animals and birds.
   b. Different homes; cottage, mansion, hotel, tenement, apartment house.
   c. Materials of which houses are built; where obtained.
   d. Compare our homes with: homes in hot lands, in cold lands; Indian homes.

REFERENCES: Chamberlain, *How We Are Sheltered;* Dodge, *Home Geography*, pp. 7-8.

2. Groups of Homes:

a. The home town: why location was chosen; roads and streets leading to the town, indicating names, kind of traffic, modes of travel; nearest large city and how town and city are connected. History and geography facts are closely interwoven. See History.

b. Our city—Baltimore: its location; distance from the home town; compare town and city in relation to size, streets, buildings, occupations of people, transportation; reasons for living in a city.

Projects:

1. Collect pictures of homes in our own community and country; in far-away countries about which children have heard or read; homes of birds and animals.

2. Have conversation lesson about homes of animals and birds with which the class are familiar.

3. Map of home town made by teacher upon which children locate school, churches, post-office, stores, bank, and child's home.

4. Have children name towns and cities which they have visited and tell something of interest, as, an incident, a public building, a beautiful street. Recall the names of cities mentioned in literature and history.

5. Collect pictures of villages, towns, and cities illustrating street scenes, markets, homes, public buildings and occupations of people . Mount on bogus paper or manilla paper and keep in portfolios.

6. Make cards for the Game of Cities, and prepare to play the game at a later date.

REFERENCES: Chamberlain, *How We Are Sheltered*, pp. 7-8, 9-10, 14-16; Dodge, *Home Geography*, pp. 9-10, 14-16.

Type land forms in the neighborhood; plain, rolling land, hill, valley.

1. Where Homes are Built.

a. Homes on plains: the view; path or road; absence of hills; occupations of people—farming and gardening; towns.

b. Homes on rolling land: the view—scenery; made by the hill. slope and valley; occupations of people—farming, gardening, grazing; roads to town; where towns are built.

c. Homes on mountains: by means of pictures some idea of a home in a widely contrasted environment may be gained but clearer concepts will be gained later in the study of the Mountain Maiden.

d. Homes in city and country: compare one environment with the other; the view. need of parks in city; need of care and added beauty in country roads, lanes, and yards; pleasures in country contrasted with city pleasures; advantages of city—museums, libraries, art galleries; advantages of country — air, space, playgrounds; suburbs of a city.

2. Where Cities are Built:

(The surface of the land and water)

a. Reasons for building on level land.

b. Reasons for building near water.

Projects:

1. Field trips, not necessarily long, to definitely study land forms, as, the hill, slope and valley.

2. Committees for "sight seeing tours," studying the landscape.

3. Collections of pictures for the "Book of Homes." Classify according to geographical aspects, as plains, hills, valleys, mountains, town and city.

4. A Saturday excursion—city children to the country; country children to the city setting a definite problem in sightseeing.

REFERENCE: Dodge, *Home Geography*, pp. 16-21, 32-36.

VII. Occupations and Industries of the Community: Agriculture; Commerce.

In the study of type industries which provide food, clothing, and shelter the geographical aspects of the situation are presented, leaving to the field of Industrial Arts the history of the processes involved. As far as the children are concerned, there is but slight differentiation, but in the teacher's mind the two are distinct phases of the same problem. How man has used weather conditions, seasonal changes, and surface features in securing the necessities of life are important factors, and observation work is just as essential in providing a rational starting point as in the study of weather, seasons, and land and water forms.

1. The Farm or Market Garden.

a. Corn or Tomatoes:

In the fall make a study of the various crops—or center upon one; as corn or tomatoes, raised in the vicinity: the soil upon which they grow; the processes of gathering; the uses to which they are put; transportation to market, etc. In the spring note preparation of soil, planting and tilling. Note the relation of soil to crops—what is raised on sandy soil, loams, heavy clay, marsh or swamp lands.

b. Soil—origin of soil; how rocks are crumbled; broken by frost action, weather conditions. [This may be left until spring, and be presented in relation to the raising of a best plant.]

Projects:

1. Visit a farm in the autumn, if children are not familiar with farm activities. Observe in relation to market supply.

2. Collections of pictures showing stages in preparation of soil, planting, tilling; tools and machinery used in primitive times and modern times.

3. Have children make lists of crops gathered in the fall in the community.

4. Collection of food products. See Nature Study and Industrial Arts.

2. The Market or The Grocery Store.

a. Relation of garden, farm, and market; kinds of supplies; transportation from farm; delivery to city homes; farm products greater than the needs of country people, for farm produce necessitates exchange or trade.

b. Source of food supply; nearby regions; hot lands; faraway lands. Make a list of the familiar ones, e. g., oranges from California, Florida; bananas from Mexico, and southern United States; tea and rice from China; coffee from Brazil; dates, figs, olives from Africa; sugar from Cuba and Southern United States.

c. Condition of growth—climate, rainfall, preparation for market; transportation, care in shipment will be briefly considered when the region is studied later, as "José in Cuba" gives sufficient opportunity for a few general facts about the raising of bananas.

Projects:

1. Visit a market as a rational starting point, a concrete basis by which to establish ideas of relation of garden and farm and market, and to fix the idea of interdependence.

2. Collect pictures of markets at home and abroad; fruit, vegetable and fish markets: collect and classify fruits found in hot, rainy regions; in hot, dry regions, in temperate regions.

3. Make a list of fruits which we send away—exports; a list of those we receive from abroad—imports.

4. Play the game "My Ship's Coming In."

REFERENCES: Chamberlain, *How We Are Fed*, pp. 32-39; Dodge, *Home Geography*, pp. 59-66.

3. The Dairy. See also Industrial Arts.

a. Products of the dairy.

b. Names of dairy farms learned from milk wagons. Location of farms on the county map or map made by teacher.

c. Care of cows; pasture lands, winter food, shelter, sanitary conditions.

d. Milk; how kept sweet; how transported and distributed.

e. Holland, Switzerland, Norway and Sweden; grazing lands, care of cattle; shipment of products.

[This last point may be left until later when stories of life in these lands are presented.]

REFERENCES: Chamberlain, *How We Are Fed*, p. 41; Hill, *Lessons for Junior Citizens*, pp. 15, 24, 38.

4. Trade or Exchange.

a. A visit to the farm shows that the supply of farm products is greater than home needs. A visit to the market shows what becomes of the surplus and why. Show why commerce grows out of needs and wants of people which in turn arise out of differences of occupations.

b. Trade or barter among primitive peoples, the Indians. Recall Second Grade data. Trade among the early pioneers, of the neighborhood and the country. Commodities exchanged; basis for exchange, kinds of money used.

c. Our town as a trading center; what is brought to town.

d. Baltimore as a trading center. Very simply present the large facts to show what makes a good market; waterways, railroads, good roads, oyster beds, farming country. List the chief exports and imports of the locality. Necessity for transportation and good roads.

Projects:

1. Pictures of articles used as a medium of exchange; blankets, wampum, tobacco.
2. Collection of pieces of money; beads, shells, coins.
3. Pictures illustrating different ways of reaching the trading center, Baltimore.

REFERENCES: Bass, *Pioneer Life*. Herbertson, *Man and His Work*, chaps. 10-11; Dodge, *Home Geography*, pp. 45, 59-66.

5. Roads.

a. Review the beginning of roads; roads of animals and Indian trails, the blazed trail, branching roads, and the crossroads; names of highways in the community.

b. Need of good country roads; by the farmer, merchant, and all the people of the community. How to make a good road.

c. How roads have been improved; compare pioneer roads with those of present day; compare old road with the pike or automobile routes of today.

d. City streets; need of paving, sidewalks; lighting.

Projects:

1. Collect pictures of roads illustrating travel and transportation in different parts of the country.

2. Map of vicinity showing the principal highways. Have drills upon symbols, direction, location, and use of scale.

3. Make a class automobile guide book on a much frequented thoroughfare; insert map and write the necessary explanatory notes.

REFERENCES: Chamberlain, *How We Travel*, pp. 22-23, 31-32; Dodge, *Home Geography*, pp. 47-49; Bass, *Pioneer Life*, pp. 82, 132-136; Mason, *Origin of Inventions*, pp. 348-349.

I. Seasonal Changes: WINTER

Observational work on changing seasons, watching their effect upon the occupations of the people, animals, and vegetation continued.

II. The Sun's Path:

1. Continue observations at stated intervals as previously indicated. Note time of lighting street lamps, and lamps in the home.

2. Try to bring out how the shorter days, longer nights, and more slanting rays of the sun cause winter to be colder than autumn. Do not tell children this, but help them to discover it.

III. Weather Conditions:

1. Weather. Temperature. Note change in dress; in heating of home and school.

2. Wind. Study weather vane. Note effect on temperature. The relation of direction of wind to fair or stormy weather. Note force of wind, i. e., hard to walk against a stiff wind.

3. Snow and ice. Note relation of temperature to size of flakes. Effect of

heat, of wind, upon snow, on ice. Effect on teaming, on car service, and on telegraph wires. Uses of snow and ice.

4. Weather record continued.

World Geography

DESCRIPTIVE AND PICTORIAL

I. Stories of Child-Life in Other Lands:

Emphasize the fact that people live differently because the environment is different. By means of pictures and vivid portrayal, and reading, enable the child to get concepts of physical environment for which his home region gives him no experience basis, except perhaps a name learned in connection with some incident, which remains a mere name until introduced in proper setting. Make these pictures of other lands sharp and distinct by giving detail as to home, clothing, shelter, and means of transportation. Present countries in sharp contrast with our own and with each other. Bring out the physical aspects of each of these environments, climate, mountains, deserts, tropics, as conditions which are met in providing the necessities of life. Make comparison with our every day life. Do not use maps to show where these distant regions are, but make the subject so vivid through telling, reading, pictures and dramatic play, that the concepts gained can be used to give meaning to the symbols for these regions when they are met in the succeeding grade and used in globe and map work. Familiarize the children with names of important places but be sure the name calls up some significant detail. Say these countries are in Europe or Asia, across the Atlantic or Pacific Oceans.

Some of this work will extend over the spring quarter. Since the reading material furnishes much information the geography period may well be used to establish the fundamental geographical aspects through summaries by the children, supplemented by the teacher.

1. Life in Cold Lands:

a. Review Eskimo life; food, clothing, shelter, modes of travel, pleasures presented in the previous grade.

b. Stress through discussion the physical aspects of the environment in its relation to the social and industrial activity of the people.

c. Stories of Child-Life in Lapland.

REFERENCES: Andrews, *Seven Little Sisters*, "Agoonack," Chance, *Little Folks of Other Lands;* Dutton, *Fishing and Hunting;* Peary, *The Snow Baby;* Smith, *Esquimo Stories.*

2. Life in Hot Lands:

a. The Pastoral People: Gemila, of the desert; Bumo and Bu, of the cold mountain region contrasted with life on hot, dry desert.

1. Homes; location dependent upon food and water supply; kinds; furnishings and property.

2. Food; kinds, means of securing food; preparation and serving.

3. Clothing; materials, skins, leathers, wool, camel and goats' hair; manufacture.

4. Trade and transportation: modes of travel; rug fairs.

5. Social life: in the family, head of family, care of children, training, and games; in the clan, patriarch or leader, respect for women and children, methods of defense.

b. Stories of Child-Life on the Desert. Gemila. A Little Arab Boy. Bumo and Bu in Tibet. Pepy and Athor. Read by children.

c. Stories of Child-Life in the Tropics. Little Brown Baby in Hawaii; José in Cuba. Tondo in the Philippines. Read by children.

REFERENCES: Andrews, *Seven Little Sisters*, "Gemila"; Baldwin, *Old Stories of the East;* Chamberlain, *How We Travel*, pp. 1-17; Chance, *Little Folks of Other Lands*, pp. 67-81; Dopp, *Place of Industries in Elementary Education*, chap. III.

3. Life in the Highlands:

a. Jeanette, the Mountain Maiden of Switzerland; Pierre and Violette of Norway. Read by children.

b. Stress the physical aspects, mountains, valleys, mountain streams, fiords, grazing lands, in relation to the social and industrial activity of the people.

4. Life in the Lowlands:

a. Hans and Gretchen, in Holland. Peter at the Dyke. Read by children.

b. Discussion to bring out physical features which are strongly contrasted with highlands; varying activities, as the result.

REFERENCES: Andrews, *Seven Little Sisters; Jeanette, the Mountain Maiden; Little Brown Baby in Hawaii;* Dutton, *In Field and Pasture;* "*Bumo and Bu,*" "*Pepy and Athor;*" Herbertson, *Man and His Work;* Shaw, *Big People and Little People of Other Lands;* Schwartz, *Five Little Strangers.*

Projects:

1. Collections of pictures which illustrate the region studied; physical aspects, industrial aspects; exports, imports; modes of travel; people; animals.

2. Dramatization of situations, as, With Pierre and Violette at Hay-Making.

REFERENCES: Dodge, *Advanced Geography*, Hawaii, pp. 89-101; *Cuba*, p. 193-199; *Philippines*, p. 176-180; *Switzerland*, p. 278.

HOME OR OUT-OF-DOOR GEOGRAPHY—SPRING

OBSERVATIONAL

I. Seasonal Changes.

Follow plan of observation suggested in the autumn.

II. Sun's Path.

III. Weather Conditions.

1. Sun. Position at 9, at 12, at 3.30. Compare length of days for several weeks.

2. Winds: effect on temperature. Note that north wind lowers, south raises temperature.

Force: difficulty in walking against it. Size of objects moved by it. Classify as "light," "moderate," and "high."

3. Rain. Note size of drops; amount; falling in a straight or slanting direction; effect on fields and gardens; the beating down of some plants when rain is heavy; effects on streets, gutters and catch-basins; effect on air. Protection against rain; children; houses; streets and roads.

4. Weather record.

IV. Map Work.

1. Teacher will make maps of locality—which children are taught to read as the excursions and reports demand. Familiarize the children with the symbols used to indicate the geographical facts already experienced. Gain clear ideas of location and direction.

V. Surface Features.

Type water forms in the neighborhood; springs, wells, stream, river, bay, ocean. Especial emphasis should be placed upon the work of running water at this time of

year. Study the river and streams of the community with special attention to the work of running water in cutting gullies and valleys, in carrying heavy loads, in making deltas in mud puddles, and at the base of steep slopes. All the work given in the autumn should be reviewed from the standpoint of what change takes place in the surface of the land through various forces: water, wind, temperature, frost.

1. Water; supplies the needs of man, plants, and animals.
   Water in the earth:—
   a. Source of underground water.
   b. Observation of wells and springs.
   c. Uses of underground water.
   d. How obtained: in our homes; in cities; by plants and trees.
   e. Briefly discuss water supply.

Projects:

1. Visit a spring in the neighborhood. Make it the basis of discussion.
2. Visit an artesian well; a windmill pump.
3. Observe trees after rainfall and learn where to water their roots.

3. Streams:
   a. Visit a stream in the neighborhood.
   b. Describe a stream; size, direction, current, banks, bed, plants near stream on the banks and in the water.
   c. Note same stream after heavy rain. Explain change. Have a jar of water brought from stream in order to show that water carries something with it.
   d. Work of stream; what it carries; where it gets its load; what it does with it. Observe streams in yards and gutter after a rain.

Projects:

1. Excursion to a stream. Teacher make a map of the region including the stream, valley, hill and plain. Use on the trip to locate each point of importance, and in later discussions of trip use the map freely for purposes of stressing fundamental ideas of map reading.

2. Make a picture of the rivulets seen in the street after a heavy rain, noting direction, change of banks, widening into ponds, the deposit making deltas in puddles and then the plain. Picture a stream flowing through a meadow.

3. Collection of pictures of streams and rivers, lakes and ponds showing beauty of landscape; uses to man and animals.

4. Lakes and Ponds:
   a. Cause of broadening of stream; where and when ponds are formed.
   b. Uses of ponds and lakes; pleasures in summer and winter; fishing; ice-cutting.
   c. Swamps: how caused; plants growing in swamps; animals; compare wading or walking in swamp with walking in woods.

5. Rivers:
   a. Names of streams: rill, rivulet, creek, branch; falls, brook.
   b. Name of larger stream, river.
   c. Work of a river; as a roadway, as a freight-carrier.
   d. Describe river: river system, river basin, source, mouth.

Projects:

1. Excursions to the streams and ponds in the neighborhood will help the children to get clearer concepts which will furnish the basis for all discussions.

2. Pictures should be used to illustrate each point made, e. g., pictures showing rivers as roadways, rivers changing the surface of the land; rivers in the valley or basin; the beginnings of rivers, mouths of rivers.

3. The teacher's map of the vicinity showing the river in its rela ion to the surrounding country, town and bay is essential. The Patapsco, the Gunpowder, Bear Creek

6. Ocean:

a. Name the largest stream of water.

b. Ocean as a roadway. How we get to the ocean from Baltimore. Means of travel. Name the ocean crossed by Columbus and the Pilgrims.

REFERENCES: Bass, *Pioneer Life*, pp. 94-96; Dodge, *Home Geography*, pp. 22-25; Frye, *Brooks and Brook Basins*, chap. 5 and 6; Tarr and McMurry, *Home Geography*, pp. 44, 58-59.

VI. Occupations and industries of the Communi y:

1. Spring activities.

Name the occupations in which people are engaged in the spring season; the chief occupation; reasons for this; its value.

2. Name the chief industries in Baltimore County; in the State; in the City.

3. Briefly study one phase of agriculture in your neighborhood as, The Florist, or The Market Gardener, or The Fruit Grower. Note geographical conditions which affect the results—weather conditions, seasonal changes, fertilizing soils, cultivation, gathering, marketing, this last touching transportation and trade.

WORLD GEOGRAPHY

DESCRIPTIVE AND PICTORIAL

I. Stories of child life in other lands:

1. Life in the rain forests—the Congo.

Manenko, the little dark girl.

II. Stories of child life in the countries from which some of the children and their parents have come:

1. Story of German child life—the Christmas cakes and bakery shops.
2. Story of Italian child life.
3. Story of French child life.
4. Story of English child life. May day customs.

Projects:

1. For purposes of review arrange a series of "Travel Talks" with pictures.
2. Arrange a Travelers' Game, using pictures and cards for the purpose.
3. Play "Aunt Martha's Corner Cupboard."
4. Dramatize some familiar aspect of child life in other lands; as, The May day customs of merry England.

REFERENCES: Andrews, *Seven Little Sisters*, "Manenko"; McDonald and Dalrymple, *Little People Everywhere*.

FOURTH GRADE

The work of the Third Grade aimed to provide, through observation and experience, a few fundamental geographic concepts which serve as a foundation for work of a more intensive kind in this grade. Home or out-of-door geography is continued. Observations of

seasonal changes, weather changes, the sun's apparent path across the sky are made less frequently but at stated intervals to test the child's knowledge of the simple facts. An intensive study of the typical surface features in the immediate environment and its related industry is supplemented by the use of the text. The child, as a member of an industrial community, should have some respect for resource and production, for markets at home and abroad, and these general facts furnish a basis for a growing comprehension of social and enonomic life. This concrete geography forms a basis for comprehending distant regions, since only by comparing and contrasting the remote with the home region, can any appreciable correct interpretation of life in far away lands be gained.

Children in the Third Grade have become familiar with distant regions strikingly different from our own through the medium of stories told or read to them, which furnish a background for more intelligent work with the world as a whole. This work has served two purposes: (1) to teach those features for which the home region furnished no good example, (2) to give meaning to the symbols of distant regions when they are met in the globe study presented in this grade.

This is the period when the memory is most active, and mechanical processes make appeal. It is the time to fix the basal facts of place geography, not by learning arbitrary lists, but by enriching the content and establishing the map habit.

Globe and map studies. Globe studies and later, map studies, are emphasized through which the pupils gain power to read, and intelligently interpret maps, and thus are able to place themselves in the world. This is secured by teaching them to interpret, by means of symbols, areas well known to them, as has been done in the previous year; and by emphasizing in every lesson the relation between themselves and the great world outside.

An 18-inch globe and wall maps, together with the proper use of the small outline or base maps, give facility in map readings, and tend to fix in the child's mind the main facts about the locations of the various places studied in this grade. An abundance of material such as pictures, guide books, railway folders, postcards, products and interesting articles of manufacture, materially aid in increasing interest.

In this grade the text supplements the oral development work giving the pupil in a clear, concise form what he has already found out through observation and experience. Training the pupils to use the text intelligently tends to insure good habits and secure good results. The text is to be used by the children to re-inforce the

teacher's presentation. There is grave danger today that the child may become a passive listener to the geography lecture. A re-action on the part of the pupil is necessary. There should be a constant return from the pupil, and a discussion of facts gained through observation and oral presentation, but a constant relation of the material of the textbook to the work of the teacher is also essential. He should be taught *how to study* the text, finding the essential points, learning to interpret the pictures, and the maps as an aid to clarify and fix in memory the important geographical facts. There are great possibilities for laying the foundation of right habits of study in this grade.

Supplementary books containing geographical content should be read extensively and simple reports made to the class. The work affords opportunity for good *oral composition* through clear, well defined summaries of the points gained in a lesson.

Notebooks: Each pupil will keep a notebook as a supplement to the text, containing records of oral and written summaries and outlines; illustrations, consisting of sketches or pictures; of base maps, indicating certain features.

The Text: Tarr and McMurry's *Home Geography* will be used to summarize the essential facts of a topic after oral presentation and for purposes of review.

HELPFUL BOOKS

References for teachers: McMurry, *Special Method in Geography;* Dodge and Kirchwey, *The Teaching of Geography;* Jackman, *Field Work in Nature Study;* Twitchell, *Maryland Supplement; The National Geographic Magazine* (Copies at Office).

References for children: Book I, by King, *Picturesque Geography Readers;* Larkin Dunton, Ed., *The World and its People;* Carpenter, *Geographical Readers;* Wade, *Our Little Cousin Series;* McMorris, *Our Little Cousins;* George, *Little Journeys;* Carroll, *Around the World;* McDonald and Dalrymple, *Little People Everywhere;* Chamberlain, *How We Are Clothed;* Chamberlain, *How We Are Fed;* Chamberlain, *How We Are Sheltered;* Chamberlain, *How We Travel.*

See also books listed in the Voluntary or Pleasure Reading Lists for Second, Third and Fourth Grades. Make use of the simpler texts as well as the more difficult ones.

Time allotment: Recitation, 20 minutes per day, 100 minutes per week. Seatwork, 50 minutes per week. Total, 150 minutes per week.

Distribution of subjects and time allotment: Throughout year: Observational work at regular intervals. Use nature study periods occasionally.

September and October: Type forms of the neighborhood.
November and December: Globe lessons and map study.
January: Baltimore County and vicinity.
February, March, April and May: Journey geography.
June: Out-of-door geography continued from the autumn.

I. Home or out-of-door geography:

Observational.

1. Seasonal changes, to include sun's path.
2. Weather conditions.
3. Surface features.
   a. Type forms in the neighborhood, a basis for field work.
   b. Extension of field work to include similar larger types.
   c. Industrial activity in its relation to the environment.

II. The earth as a whole or globe studies:

1. Continents and oceans.
2. Directions.
3. Latitude and longitude.
4. Size of the earth.
5. Motions of the earth.
6. Climatic conditions on the earth.

III. Continental and regional geography:

1. Baltimore County and vicinity.
   a. Location, extent.
   b. Natural features.
   c. Connection with surrounding counties and Baltimore.
   d. Industries.
   e. History.
2. Journey geography.

   Study the following regions using the outline plan below:

   a. North America: Western Plains—wool; corn or wheat. Cotton Belt—cotton or sugar. Mountains—coal or lumber.
   b. South America: The rain forests of the Amazon—rubber.
   c. Europe: Rhine Valley; Italy; or Russia.
   d. Asia: China and Japan; or India.
   e. Africa: Congo.

Outline or plan:

1. Location on map of region visited.
2. Trace route of travel.
3. Study of people.
4. Industries.
5. Products used at home and abroad.

HOME OR OUT-OF-DOOR GEOGRAPHY

OBSERVATIONAL

I. Seasonal changes.

1. Observation of changes in season: effect observed in nature; on activities; briefly considered in review of third grade work.

2. Observation of sun's apparent path across the sky; time of sunrise and sunset, with the consequent varying length of day and night.

Noon altitude of the sun, or angle of the sun's rays as shown by these observations, care being taken to make accurate observations on the vernal and autumnal equinoxes, March 21 and September 21, and the summer solstices, June 21 and December 21.

Establish clearly the following:

In winter, the coldest, shortest day; low sun, very slanting rays, long shadows, December 21.

In summer, the warmest, longest day; high sun, rays nearly vertical, shadows short, June 21.

In spring and autumn, mild days; days and nights nearly equal, March 21 and September 21.

II. Weather conditions.

a. Make observations once a week, leading children to know that change in direction of wind causes change in weather. Correlate wind with state of sky, temperature, precipitation.

b. Summarize at end of month; genèral weather, prevailing winds, temperature, changes in length of day, moon's phases.

Materials:

Records of a weather committee; U. S. weather maps, weather forecast, newspaper weather report, almanac, thermometer, weather vane.

III. Surface features.

Type forms in the neighborhood: plain, hill, valley; spring, stream, river, bay.

1. Field work.

Concrete experiences by means of excursions and map readings from simple maps of the vicinity are repeated and extended from the third grade. When it is manifestly impossible to undertake field work then the school yard, neighboring hilly streets, the flat surface of a field, the hill in the distance, must be used. Pictures are very valuable in extending the knowledge of children, but have meaning only through experience. Concepts of terms used in the text need to be clarified by seeing, as gentle slope, steep slope, valley, and others.

Use whatever the landscape offers as a starting point for an intensive study of the typical surface features and its related industrial activity. Summarize briefly the chief points observed, and the points of difference between the surface feature studied and its widely contrasting areas, as plains and hills and rolling land; hills and mountains. Use the text and supplementary reading to verify the experiences of pupils.

2. Extension of field work.

Each locality offers opportunity to study type forms of land and water which may serve as the basis for study of types outside of the immediate range, viz., mountain, mountain system, river system, desert. Stories told to children, pictures used and the right use of the text insures the formation of correct geographical concepts.

3. Outline or plan.

In each school community the approach to the intensive study varies according to the environment. Two suggestive plans are presented, one indicating the study of surface features and the related industrial activity from the standpoint of the prominent type in the community, viz., the river; the other, the scenery, as varied by the plains, hills and valleys of the surrounding country. Close analysis shows that while the method of approach varies, the end is the same:

ENVIRONMENT STUDY—ST. HELENA

Teacher's aim:

To teach surface features in home environment, leading to study of features not found in home environment. Patapsco River, the point of chief interest, is the first type studied.

Pupil's aim:

To observe Patapsco River, and find out the work of the river in the immediate vicinity.

Method of procedure:

1. Excursion to Patapsco River; observation of its banks; its course: winding or straight; fishermen bringing in their spoils; boats: excursion and freight; manufactories along the banks.
2. Discussion upon the following topics:

A. The River

I. Patapsco River:

1. Source—creek, stream.
2. Changes and growth.
   Its upper part; its middle part; its lower course.
3. How Patapsco compares with other rivers.
4. River system; river basin.
5. What seen along its banks.
   a. Pleasure resorts: Riverview, Picnic grounds.
   b. Forts: Carroll and Fort McHenry.
   c. Manufactories; sugar refinery; iron foundry—Dundalk; steel foundry shipyard, coke ovens—Sparrows Point.
6. Uses of Patapsco River.
   a. Manufacturing.
   b. Navigation.
   c. Drainage.
   d. Source of food supply.
7. Its channel and harbor. How kept open.

Projects:

1. Take an imaginary trip down Patapsco River. Use map; locate towns along route. Trace course of Patapsco River on map of Baltimore County.
2. Collect pictures of summer resorts, forts, towns and their related industries.
3. Excursion to the steel plant or shipyards at Sparrows Point.

II. Industrial activity:

1. Manufacturing: steel plant; rails or coke:
   a. Source of raw material, mine.
   b. Shipping to Sparrows Point.
   c. Process: heating, moulding, cooling, shipping.
2. Shipbuilding might be selected instead of 1.

REFERENCE: Tarr and McMurry, Book I, pp. 31-40.

B. Mouth of Patapsco River—Bays

I. Chesapeake Bay:

1. Formation.
2. Changes and growth; its upper part, its lower part.
3. Uses of bay; transportation; drainage; source of food supply; oystering, fishing.

II. Industrial activity:

1. Oyster culture. See Industrial Arts.
2. Fishing.

REFERENCE: Tarr and McMurry, Book I, pp. 50-54.

C. Mouth of Bay—Ocean

I. Ocean:

1. Atlantic Ocean.
   a. How formed.
   b. Size.
   c. Use.
   d. Water in ocean.
   e. Value of ocean: source of rain water; for pleasure; for navigation; difficulties and dangers—how met.
2. Harbors:
   a. Importance.
   b. Use of wharves.
   c. Use of lighthouses.
   d. Use of lightships; signals from lighthouses and lightships.
   e. Entrance to harbor: the channel, use of buoys; bell buoys, whistling buoys.
   f. Use of breakwater.
   g. Points or capes; peninsulas.

REFERENCE: Tarr and McMurry, Book I, pp. 44-45.

II. Industrial activity:

1. Fishing: On Atlantic Coast—cod.
   a. When caught.
   b. Method of catching.
   c. Dangers of such fishing.
   d. Method of marketing.

REFERENCES: Tarr and McMurry, Book I, p. 45, p. 110; Tarr and McMurry, Book II, p. 36.

2. On Pacific coast—salmon.
   a. When caught.
   b. How caught.
   c. Shipping: canneries along coast.

REFERENCE: Tarr and McMurry, Book I, pp. 148, 149.

It will be necessary now to come back again to the environment of the school and select some prevailing type, the study of which will lead out to unfamiliar types. In this locality, the general plan would be as follows:

A. Plains

I. Observational work: Text for verification.

1. Plain surrounding St. Helena; appearance of landscape.
2. Slopes, and their value.
3. Drainage.
4. Soil conditions.

II. Industrial activity: Farming, truck gardening.

1. In the community: truck gardening.
2. Western plains: grazing.

REFERENCE: Tarr & McMurry, Book I, p. 16.

B. Hills and Valleys

I. Observational work: Text for verification.

1. Rolling land and plains contrasted. Pictures.

2. Variation in scenery.
3. Drainage.
4. Soil conditions.
5. Occupations of people.
6. Roads.

II. Industrial activity: Grazing, farming.
REFERENCE: *Tar and McMurry, Book 1,* p 18.

C. Mountains

I. Observational work. Text for verification.
II. Industrial activity: Mining or lumbering.
REFERENCES: *Tar and McMurry, Book 1,* p. 23.

ENVIRONMENT STUDY—ROLAND PARK—Frances Evans, Roland Park School

Teacher's aim:

To teach surface features in home environment leading out to features not found in home environment. Hills and valleys around Roland Park as a type.

Pupil's aim:

To observe the appearance of the land west of Roland Park, and to tell why it is a good place for a residence.

Method of procedure:

1. A walking trip across Roland Park to the Baltimore Country Club near Club Road, observing contour of land;
2. Discussion upon the following topics:

A. Hills and Valleys

I. Hills:

1. Beauty of hilly country.
2. Definition of hill.
3. Scenery:
   a. From low hills; from high hills;
   b. Valley, stream, river, wooded slopes.
4. Uses made of hills:
   a. Soil; farming and grazing.
   b. Reasons for building homes there: beautiful views, fresh air, good drainage.
   c. Reasons for castles built upon hills.
   d. Reasons for Indian homes built upon hills.
   e. Reasons for homes of settlers of New England built upon hills.

II. Valleys:

1. Large valleys of Baltimore County: Green Spring, Worthington, Dulaney, Long Green. Locate on map.
2. Large valleys of our country: Mississippi, Hudson, Potomac, Ohio.
3. Uses of valleys: homes, agriculture, roads and railroads.
4. Size of valleys. A divide.
5. Mississippi Valley:
   a. Location.
   b. Size: much like our valley except that it stretches for miles and miles.
   c. Importance of agriculture.
6. How valleys are formed.

III. Industrial activity:

1. Dairying: see third grade geography.
2. Agriculture in the Great Central Plain of the Mississippi Valley. See outline for Western prairies and Great Plains.

REFERENCE: Tarr and McMurry, Book I, pp. 18, 23.

Projects:

1. Excursion to a dairy farm by a committee who makes definite report to the class
2. Collection of pictures showing contrasting scenes and activities in hills and valleys.
3. Pictures showing young and old valleys.
4. Class book containing class stories, independent work, outlines, sketches, illustrations, and collections which prove "Why Roland Park is a good Place to Live."
5. Arithmetic problems related to the local industries.

B. Plains

I. Plains:

1. Appearance of school yard and immediate vicinity.
2. Definition of plain.
3. Extent of plains in United States.
4. What you see on plains.
5. Value of slopes.
6. How swamps are overcome.
7. How plains are drained.
8. Uses of plains: farming and grazing.

II. Industrial activity:

Sheep raising on the western plains.

REFERENCE: Chamberlain, *How We Are Clothed;* School Classic Series—*Story of Wool;* Tarr and McMurry, Book I, p. 16.

C. Mountains

I. Mountains:

1. Appearance of hills in surrounding country.
2. Appearance of mountains.
3. Size.
   a. Pictures.
   b. Reports of trips by members of class.
4. Uses of mountains:
   a. As summer resorts—temperature.
   b. Mining; metals, coal.
   c. Lumbering.
   d. Water supply.
5. A trip up Mt. Blanc:
   a. The start: surrounding country.
   b. The tree line: vegetation.
   c. The snow line: glaciers, mountain streams.
6. How mountains have been made.

II. Industrial activity:

1. Mining.
   a. Collection of minerals.

b. Reports of visit to coal depot, or to harbor when ore boats are unloaded; to coal mine.

c. Pictures of mining conditions.

(1) Where.

(2) What.

(3) How.

(4) Dangers.

d. Uses: raw and manufactured products.

e. Shipments.

f. Life in mining camps.

2. Lumbering may be treated in a similar detailed manner.

REFERENCES: Carpenter, *Geographical Reader, North America;* Chamberlain, *How We Are Sheltered;* Tarr and McMurry, Book I, p. 23.

D. Lakes and Rivers

I. Lakes:

1. Excursion to Lake Roland. Learn where its water empties. Outlet into Jones' Falls, finally Patapsco River.

2. How lakes are formed.

3. Names for parts of lakes.

4. Why some lakes are salt.

5. The Great Lakes.

6. Uses of ponds and lakes:

a. Water supply.

b. Food supply, ice.

c. High-ways.

d. Resorts along shores.

REFERENCE: Tarr and McMurry, Book I, p. 41.

II. Rivers:

1. Recall excursion to Lake Roland—note outlet into Jones' Falls, finally Patapsco River.

2. Rivers in general: Source; changes and growth; upper part, middle part, lower course—mouth. River system—river basin. Work of river.

3. Patapsco River: Use map, pictures, first-hand information. Compare with rivers in general.

a. Along the banks:

(1) Pleasure resorts: Riverview, picnic grounds.

(2) Forts: Carroll and McHenry.

(3) Manufactories: Sugar refinery; iron foundry,—Dundalk; steel foundry; shipyards; coke ovens; Sparrows Point.

b. Use of Patapsco River:

(1) Manufacturing.

(2) Navigation.

(3) Drainage.

(4) Source of food supply.

III. Industrial activity: Manufacturing: Cotton Duck.

1. Location of mills. Hampden on Jones' Falls.

2. Source of raw material:

(1) Southern states.
(2) Cotton culture.
(3) Transportation: water; railroad.

3. Process: Cotton run through picker; carded; spun; woven.
4. Uses: Canvas for tent coverings, awnings.

REFERENCES: Chamberlain, *How We Are Clothed;* Carpenter, *Geographical Reader, North America;* Tarr and McMurry, pp. 31-40.

E. Bays

I. Chesapeake Bay.

1. How formed.
2. Its upper part; its lower part.
3. Uses of bays.
   (1) Transportation.
   (2) Drainage.
   (3) Source of food supply.

II. Industrial Activity:

1. Oystering. See Industrial Arts.

REFERENCE: Tarr and McMurry, Book I, 50-54.

F. Ocean

I. Atlantic Ocean.

1. Entrance to ocean from Chesapeake Bay: Cape Charles and Cape Henry.
2. Water of the ocean: Taste, movement, color.
3. Extent: How supplied with water—temperature—parts of the ocean.
4. Value: As a source of rain water; for pleasure: resorts along shores; for navigation; as food supply.
5. Harbor:
   a. Why important; seaports.
   b. Uses of wharves; uses of lighthouses; uses of lightships; signals.
   c. Entrance to harbor: The channel; buoys, bell and whistling; pilots.
6. Use of breakwaters.
7. Peninsulas: capes at entrance.

II. Industrial Activity.

1. Fishing:
   a. Cod on Atlantic Coast.
   b. Salmon on Pacific Coast.

REFERENCE: Tarr and McMurry, Book I, pp. 44-49-54.

THE EARTH AS A WHOLE OR GLOBE STUDIES

I. Continents and oceans.

1. Develop the idea that we live on a round earth and that its surface is divided into land masses and bodies of water, called continents and oceans. Have pupils read "The Ball Itself" in *Seven Little Sisters.*

2. Recognition of symbols for continents and oceans by recalling interesting facts learned the previous year and showing the symbol which stands for the country in which real people live. Drill on the globe until symbols for the more important countries are known. Keep in the foreground something which makes the place real. Form the habit of using the globe, as in locating the places mentioned in reading and literature, history and industrial arts.

II. Directions on the globe.

1. In third grade children have learned to read simple maps of the home region on which symbols were used to indicate familiar facts of the schoolroom, school grounds, and neighborhood, and directions were indicated by an arrow that pointed north. Now they are to learn other symbols for directions.

2. Develop the idea that direction symbols on the globe are meridians and parallels; that two places are north and south from each other only when they are on the same meridian, and east and west only when on the same parallel. Parallels and meridians help us to find directions and places; parallels run round the earth; meridians run from pole to pole; parallels help us to find places east and west; meridians help us to find places north and south. Drill on the use of meridians and parallels until the children are familiar with the names and can tell by various symbols the direction certain regions are from each other. Exercises like the following: We live in Baltimore. What direction is South America, where coffee is raised? Follow meridian. What direction is China, where tea is obtained? Follow parallel.

III. Latitude and longitude.

Explain as follows:

1. In reading maps of the schoolroom a pupil indicates that his desk is so many desks (or feet) east or west or north or south of a certain point, or in telling of the location of a certain town in the community, it is so many miles east or west, or north or south of a certain place. In a similar way places are indicated on the globe by giving the number of *degrees* that a place is east or west of the prime meridian, or north or south from the equator.

2. Drill by having pupils learn to find location of places on globes and maps. Keep the problems within simple multiples of 10 and 15, as 60 degrees west and 40 degrees north.

IV. Size of the earth: Scale.

1. Every globe has a scale of miles. Review idea on the local maps used in third grade.

Measure the circumference of the globe used.

(Divide the number of miles in the circumference of the earth by the number of inches to obtain the scale.)

Teacher gives the scale, as each inch equals 440 miles on an 18-inch globe.

2. Let children measure the distance between places and find width and length of continents and oceans.

V. Motions of the earth.

1. Rotation. Give the names, axis, poles. Do not attempt to prove that the earth rotates but give instead some consequences of rotation, as (1) Succession of day and night, the day as a unit of time, and activities governed by the alternating periods of light and darkness. (2) Directions. North is toward the north pole, south toward the south pole. If there were no rotation there would be no axis, no poles, no directions.

2. Revolution. Give the year as a unit of time as the day is the unit of time of rotation. Do not attempt to prove that the earth revolves around the sun, simply state that it does. Do not teach that revolution causes changes of seasons. Leave this for later grades.

VI. Climatic conditions on the earth.

1. Previous observations and discussions of seasons and weather have led the children to clearly fix the idea of the relation of steep rays to summer and slanting rays to winter. In imagination take children to places on the earth where these conditions are constant; to the equator, with constant steep rays and continuous heat; to the arctic regions with slanting rays and continuous cold; to places where conditions are variable.

2. Heat belts or zones. Summarize the knowledge gained through stories told in previous grades and organize the facts in relation to the great types of climate in the world. Concrete and vivid ideas are gained by recalling typical days in the home region, e. g., the hot, moist climate found near the equator is often typified by some hot, sultry day in June followed by a heavy thunderstorm and downpour; by using pictures; by collections of fruits, nuts, grains, spices, woods, and arranging them to show the climatic conditions in which they grow. An outline follows which aims to gather up the facts gained the previous year, and aid the pupils to form a well-defined picture of the region as a whole. Briefly consider the following regions: Cold regions; hot rainy regions; hot, dry regions; temperate region, as our own. Detailed outlines for the survey of each of the regions are obtainable at the office. The following suggests the method of summarizing the material previously learned.

Cold region:

1. Name of region; arctic, antarctic; name of continents or parts of continents in the frigid zone: Greenland, Northern North America, Europe, Asia.
2. Location on globe.
   a. Zone boundaries.
   b. Direction and distance from us determined by scale, by use of parallels and meridians.
3. Extent. Compare areas of land in cold regions with areas in hot regions.
4. Climatic conditions affecting life.
   a. Sun's path across the sky; day, night; northern lights; stars.
   b. Appearance of landscape: snow, ice, absence of vegetation; absence of civilization.
   c. Surface features: plains, hills, lakes, seas; frozen desert, tundra, steppe.
   d. Plant and animal life: names, habitat, characteristics; use.
   e. People and their occupations: homes, food, clothing, recreations, trade or exchange, transportation.
5. Trading center; city farthest north, Hammerfest, in Norway.
6. Exports to United States; whale oil, furs.

Suggestions:

1. Pupils read "Agoonack" in *Seven Little Sisters. Children of the Cold* by Schwatka, and *The Snow Baby* by Peary.
2. Read or tell children selections from *"Tent-Life in Siberia,"* by George Kennan.
3. Collections of pictures showing surface features in cold regions; collections of pictures showing imports from these regions, as animals for zoological gardens, for fur trade, curios for museums.

Continental and Regional Geography

I. Baltimore County.

Emphasis will be placed upon geographical and industrial features in relation to each other. Excursions, short field trips to selected points will help the child to

image and understand other parts of the County. A map of the County should be used extensively and a simple outline map made by the pupils.

Problem:

Why is Baltimore County a good place in which to live? The solution of this problem requires that the organization of the material shall be kept simple and quite within the comprehension of the children. By this method of procedure, the essential points presented in the formal, detailed outline which follows will be co-ordinated with natural life relations.

1. Location: in state, country, continent, hemisphere.
2. Extent: shape, length, width, area; compare with other counties of the state.
3. Natural features:
   a. Coast line; shore forms to include points of land projecting into the bay; bodies of water projecting into the land. Waters; Chesapeake Bay.
   b. Surface; plains, hills, rolling land, swamps.
   c. Rivers; Patapsco, Gunpowder.
   d. Lakes; Roland.
4. Connection with Baltimore City and towns of county.
   a. Trolley lines, railroad lines, boats, jitneys.
   b. Roads and routes.
   c. Bridges.
5. Industries:
   Agriculture, farming and dairying, oystering, manufacturing, commerce, quarrying, shipbuilding, trades.
   a. Study in detail one industry: its relation to environment; location; extent; processes; products; surplus or export; transportation and trade.
   b. List the chief occupations of people in the county; industries providing food, clothing, shelter; transportation and trade; recreations.
6. Towns in the county and their relation to Baltimore City.
   a. Location, size, importance, connection with other places.
   b. List of commercial, manufacturing and recreation centers.
7. History.
   Review briefly the work of the third grade.

II. Journey Geography.

In Third Grade children have been told stories of Child-Life in Other Lands through which some geographic facts are gained. This work is continued in this grade but in a more definite way. By imaginary journeys to different parts of the world and comparing and contrasting the distant with the near some definite knowledge of life in hot and cold countries, on mountains and plains, among civilized and uncivi ized people, becomes a part of the child's permanent possession. Strikingly d.fferent types are selected for study, one from each continent, viz., South America: The rain forests of the Amazon—rubber; Europe: The Rhine Valley; Italy or Russia; Asia: China and Japan or India; Africa: The Congo.

A general knowledge of the United States is obtained by studying the typical industries of each large section of our country, viz., agriculture, grazing and dairying on the western prairies and great plains; mining in the mountains; fishing on the seacoasts; sugar and cotton plantations in the south; and general facts of manufacture

and commerce in relation to these. Choose two sections for a somewhat detailed study emphasizing this point of view, leaving the fuller and more complete treatment of the United States to later grades.

Three plans are presented below showing the method of approach to the general geographic conditions of a country (1) through a study of its people, as China and the Chinese; (2) through a study of a typical region, as the rain forests of the Amazon; (3) through a study of a typical industry, as sheep raising in the Western United States.

United States

I. Western prairies and great plains:

Problem: Why does most of our meat come from the West? or, How is it possible for the United States to send wheat to other countries?

1. Location.
   a. Great grazing region lying to the east of the Rocky Mountains.
   b. Prairies in the more fertile regions lying in the Mississippi Valley.
   c. Extent of region as a whole, including Canada. Boundaries.
2. Route of travel.
   a. Trace the route from Baltimore, west to Chicago, then westward.
   b. Picture each day's journey; the rolling lands and farms, the mountains and mining, the fertile prairies and acres of corn and wheat; the prairie farms and scattered forests, the flowers, the land as flat as a table, and at last, the grazing region.
3. Surface.
   a. Generally level. Long gradual slopes drained by rivers. Importance of rivers.
   b. Soil; productive and non-productive areas.
4. Climate: Summer and winter temperature and winds. Amount and distribution of rainfall.
5. Products: Wheat, corn, cotton, sugar cane, sugar beets, fruits; cattle.

II. Industries: agriculture, grazing and dairying:

1. Wheat:
   a. Appearance of wheat farms, size, buildings necessary.
   b. Preparation of ground for planting, appearance of seed and plant.
   c. Harvesting.
   d. Life of farmer and family, pleasures, comforts.
   e. States engaged in raising wheat.
2. Cities engaged in making flour.
   a. Shipping of grain and flour; routes by which they are transported.
   b. Location of shipping ports and manufacturing centers: Duluth, Minneapolis,
   Chicago, Buffalo, St. Louis, Winnipeg, Montreal, Quebec.
   c. Foreign countries dependent upon United States and Canada for wheat.
   d. Other wheat raising sections of the world: Argentina, Russia.
3. Cattle-raising.
   a. Ranches; the round-up; branding; care.
   b. Shipping of cattle to stockyards of Kansas City, Chicago.
   c. Products; meat, hides, wool, horns, glue.
   d. Life of people on cattle ranches; the owner; the cowboys; Indians of this section.

Materials:

Collections of post cards, pictures, railway folders, showing different parts of country; industries; people.

Globe and map to be used in map readings.

Reading by children: The Story of a Grain of Wheat; The Story of Wool.

REFERENCES: Carpenter, *North America, Plains*, pp. 133-142; Chamberlain, *How We Are Fed*, p. 7; Tarr and McMurry, *Home Geography, Mississippi Valley*, pp. 143-157.

CHINA

1. Location.
   a. In Eastern hemisphere, eastern part of Asia, west of the United States.
   b. Climate—like ours.
   c. Use map and globe.
2. Size.
   a. It is not quite one-half the size of the United States, but has five times as many people.
   b. It is larger than all of Europe.
3. Route of travel.
   a. Travel across the United States to San Francisco. Take a boat and travel across the Pacific Ocean to Hong Kong.
   b. Make the journey as interesting as possible: across the United States—the Allegheny Mountains, the cultivated prairies, Chicago, grazing lands, Rocky Mountains, the big trees of California, San Francisco.
   c. Across the Pacific. Compare the Pacific with the Atlantic. Stop at the Hawaiian Islands, the home of the "Little Brown Baby."
4. Study of people.
   a. Race. Appearance—yellow skins, slanting black eyes, straight, black hair, broad cheek bones, and broad nostrils. Use pictures. Recall the Chinese laundryman in the city.
   b. Dress: What the men wear—loose silk or cotton clothes, heelless shoes; hair in a queue, though the custom is disappearing.

   What the women wear—gaily colored silk or cotton dresses, many made in the same style as the men's; hair dressed high with flowers or ornaments.
   c. Homes. The homes, made of bamboo, are crowded together. Little furniture; wooden pillows. Homes of poor very wretched; some homes on boats.
   d. Streets. Streets are narrow. Travel in streets in a chair drawn by men, coolies.
   e. Food. Rice, tea, fish, vegetables, fruit. Customs of eating and serving food; chop sticks.
   f. School. Description: the room; the length of school day, the small number of pupils; boys' schools and girls' schools; method of study; memorizing; studying aloud; reading from back to front, and from right to left; writing with a brush.
   g. Games. Kite flying, dragon, feast of dolls, of lanterns.
   h. Customs: Compare with ours, and note that they are the opposite of ours.

   The name of a child changed at certain ages; differences in dress; festival days; no observation of a day of rest; paying a doctor when you are well; wearing hat in paying calls and at the theatre; shaking hands; carrying money; fishing with birds; title of books at the bottom of the page; foot note at top of page; dinner beginning with dessert, ending with soup.
   i. Religion: Buddhism, worship of ancestors.
5. Industries.
   a. Farming; silk worm industry.

b. Manufacturing, paper-making, ivory carving, making of gunpowder.
c. Fishing.
d. Commerce.

6. Products sent to the United States. Tea, bamboo, silk, rice, fireworks, gunpowder, chinaware, fancy articles, fans.
7. Take a trip to a city, as Pekin, or Canton. Give a vivid description of the life there.

Materials:

Good maps, pictures in geography and from books, guide books, railway folders. Children can make collection of productions, of postcards, from places along the imaginary route of travel. *Bud and Bamboo; Pen-se*, in *Seven Little Sisters*, and *Child Life in a Chinese Home*, may be read by the children.

References: Carpenter, *Geographical Reader, Asia, China.* Chamberlain, *How We Are Fed; How We Are Sheltered; How We Travel.*

THE RAIN FORESTS OF THE AMAZON

I. A Great River—The Amazon.

1. Origin of name—El Rio de las Amazonas. Discovered by Yanez Pincon in 1500. Explored by Frances Orellana, and Europena, in 1540 who called it the Amazon because on its banks they saw a group of women who resembled the Amazons or women warriors of Greece. These people allowed no man to live with them. They fought on horseback and on foot under the conduct of a queen. They were very skillful in the use of the bow. The most famous Amazons were those who dwelt in Pontus. These built the city of Ephesus and attacked Attica in time of Thesus. They also came to the assistance of Troy. Their queen, Hippolyta, was vanquished by Hercules.

2. Location (use map and globe). North of central part of South America; in region of equatorial rains. Once said to be the great sea extending from Atlantic Ocean to Pacific Ocean. NOTE: Lead pupils to see that Amazon River lies between 50° and 75° W. Longitude. Since 1° equals 69 miles, 25° equals how many miles? It also lies directly south of the equator, one of its three mouths being crossed by equator. Lead pupil to see that this is the cause of the great volume of water. River has same latitude from source to mouth.

3. Size.

a. Greatest river system in the world: 200 small streams empty into it; empties into Atlantic Ocean through three mouths; navigable for about 3000 miles; fed by equatorial rains; (January to June) makes surrounding country a swamp. Great tidal wave rises at mouth at full moon, called *bore'* or *pororoca* by natives.

b. Life in river: alligators, turtles, great quantities of fish.

(1) Turtle: lays 100 eggs at a time; natives gather eggs for food; eggs covered with tough skin, yolk contains oil, natives pound eggs with sticks, pour water into mixture, oil rises to top when exposed to sun, skimmed off, boiled in copper kettle, used for burning and cooking.

(2) Manatee or sea cow: lives both in fresh and salt water, swims nearly full length of Amazon.

4. Route of Travel.

a. From Baltimore: Patapsco River, Chesapeake Bay, Atlantic Ocean, to the Amazon River.

b. From New York: [Boat laden with kerosene, hardware, pine lumber, and codfish.] New York Bay, Long Island Sound, Atlantic Ocean, Amazon River to Para, the rubber port.

Problem: Why these supplies are needed in the Amazon region, and what this region yields in return.

II. The Tropics: Along Banks of Amazon.

1. Dense forests.
2. Para—a typical town and rubber port in the Tropics.

a. Buildings: three or four stories high built close to sidewalk; tiled walls of green blue and yellow.

b. People—Portuguese, Spaniards, Negroes. The natives dress in coarse white cotton, and appear without hats or shoes.

c. Shops: very large; great quantities of goods displayed; bright calicoes; white cottons; hammocks of all kinds used for beds.

d. Sights: beautiful parks, wealthy homes, beautifully dressed women at windows.

e. Scene on wharf at Para.

(1) Pineapples, cocoanuts, bananas, and oranges brought from islands in small boats.

(2) Gaily dressed negro women selling fish, fruit and vegetables.

(3) Baskets of manioc flour which looks like ground popcorn; same as tapioca.

(4) Native with snapping turtle on head. Turtle turned on back, head and feet sticking out: snapping but can reach nothing.

(5) Great twists of black tobacco, great piles of rubber.

f. Atmosphere of Para.

(1) Air full of dampness; knives, cameras, guns must be cleaned every day to keep from getting rusty.

Guns loaded at night will not go off in morning.

Moldy spots on shoes in morning.

(2) Heavy rains every afternoon. People wait until rain is over to go calling.

Problem: To find what a dense rain forest yields in exchange for products from United States.

III. The Tropics: In the Interior:

1. Almost level plain.
2. Dense forest.

a. Appearance: Woods nearly same all year; always trees in blossom; always trees bearing fruit; always luxuriant leafage.

b. Sounds in forest: Almost dense silence. Only sounds heard: crash of falling trees, chattering of monkeys, shrill scream of animal caught by boa, calls of birds.

c. Life in forest: Many tree-dwelling animals.

(1) Larger animals: monkey, jaguar, sloth.

(2) Reptiles: Lizard, boa, when coiled among trees looks like vine; can crush deer in coils.

(3) Birds: Many birds of brilliant plumage, as cardinal.

(4) Insects: White ants or termites—live in colonies; build houses of earth. Many beautiful butterflies.

(5) Insect eaters: Anteater, long claws, adapted to digging ants from earth; sharp pointed snout and long tongue aid in finding and devouring food.

d. People: Negroes, the natives, live in rude huts of thatch or logs; dress in coarse, white cotton suits; appear hatless and bootless.

(1) Engaged in collecting sap from rubber trees and in making farina or tapioca.

(2) Mode of travel: on buffalo; on foot. Often must cut way through wilderness.

e. Products of forest.

(1) Rubber, coffee, cocoa, tapioca.

(2) Hardwood trees, red-wood, mahogany, dye woods, walnut, rosewood, ebony.

(3) Many edible nuts, Brazil nut, pecans. Monkeys throw nuts from trees.

IV. Industries:

1. Rubber:

a. Uses: Erasers, rubber bands; tires, boots for horses; coats, caps, gloves, shoes; belting for machinery; insulators for wires.

b. Source: Caoutchouc or rubber tree; grows best where land is flooded part of year. Best rubber comes from Amazon region.

c. The rubber tree:

(1) Grows wild, has trunk as large around as your waist; smooth, light gray bark.

(2) Fruit like horse chestnut; has three seeds; when ripe bursts with sound like cannon ball.

(3) Takes from fifteen to twenty years to produce sap enough to pay for planting.

(4) Gathering sap: thousands of Indians employed; trees far apart; no rubber groves or rubber forests; roads mere foot paths; gash cut in tree, little bamboo or tin cups fixed; sap flows very slowly; a few tablespoonfuls each day; white like milk, tastes sweet.

(5) Turning sap into rubber; hardens quickly in open air; paddles dipped into milky sap, thrust into fire of palm nuts; mass hardens, darkens, and sticks like varnish; process repeated until a paddle holds a mass as large as a 6 pound ham; value of raw rubber: lump as big as a baseball costs $1.00; hams, equaling 300 or 400 pounds packed in boxes at Para for shipment to United States and Europe.

REFERENCES: Carpenter, *South America*, pp. 312-320; Tarr and McMurry, *Complete Geography*, p. 256.

2. Coffee:

a. Conditions for growth: semi-tropical climate: can not stand frost, but must not have too much heat; soil mixed with iron, must be grown on hillside in shade of trees.

b. Coffee plant:

(1) Coffee bean like dark red cherry, contains one or two seeds.

(2) Beans sown first in seed beds, transplanted when month old.

(3) Plants set quite deeply in soil, with leaf protection from sun.

(4) Begins to bear fruit when four years old, producing three or four pounds of coffee beans each year, and bears for thirty years.

c. Picking coffee:

(1) Blossoms in December.

(2) Picked in April or May.

(3) Hundreds of men, women and children employed; carry baskets on heads when picking.

(4) Taken in ox carts (six oxen) to factories on coffee plantation.

d. Curing coffee:

(1) Run through machines to take off pulp or outside skin, and scoured until white.

(2) White beans spread upon drying platform in sun for several weeks. Stirred with wooden rakes, covered up at night and when it rains.

(3) Skinning the beans: Two coats, outer, white, like parchment: inner, like silver: thrown into machines; skins broken then fanned out.

(4) Beans graded according to size by being passed over sieves with holes of different sizes.

(5) Packed into 132 pound bags. Sewed up; shipped from Rio Janiero or Santos to Europe or United States.

REFERENCE: Carpenter, *South America,* p. 257.

3. Cacoa or cocoa:

a. The tree:

(1) Appearance:

Looks like lilac bush (15-30 ft. high); ragged and gnarly; leaves very bright green.

(2) Cultivation:

Planted in rows in orchard; weeds kept out. Trees produce fruit in three or four years.

b. The fruit.

(1) Appearance:

Looks like large ripe cucumber or squash, of lemon color or streaked with red.

(2) Thick skinned fruit with about thirty dark brown seeds like large lima beans, imbedded in pulp.

(3) Preparation for market: Fruit gathered when ripe; cut open—seeds washed out of pulp; dried in sun; shipped to factories in different parts of the world.

c. Manufactured products:

(1) Ground into meal.

(2) Oil pressed from meal.

(3) Chocolate made from oil.

(4) Cocoa made from seed hulls.

Materials:

Globe and map; good pictures of tropical forests; fruits and animal life; people and customs; collections of products typical of the region. Geographical cabinet collections from office upon request.

REFERENCES: Carpenter, *South America;* Chamberlain, *How We Are Fed: How We Are Sheltered.*

THE TEACHING OF GEOGRAPHY IN THE GRAMMAR GRADES: SOME SUGGESTIONS

"In the teaching of geography, as in instruction of every kind, the fundamental condition for success is that the teacher has so throughly mastered the subject himself, and takes so much real interest in it, that he can speak to his pupils about it, not in the set phrases of a class book, but out of the fullness of his own knowledge, being quick to draw his most effective illustrations from the daily experience of those to whom he addresses himself."—Sir Archibald Geikie.

In the *Teaching of Geography in the Elementary Schools*, by R. E. Dodge and C. A. Kirchwey, the following principles are advocated:

We must bear in mind that we are teaching *children* geography, among other things, and also that we are teaching *geography* to children. Hence our plan must be organized from two contrasted points of view, always bearing in mind that while the work must be worth while at every stage, it must also be valuable as a whole in preparing pupils for the adult life they will meet out of school.

I. The relation of school geography o the science of geography:

School geography cannot be separated from the whole vast field of geographic knowledge. Therefore the small part of the field presented in the elementary school must be geography, as this term is interpreted by the geographers who have done most to organize the science and to show its unity, in spite of its close interrelations with biology, astronomy, history, anthropology, economics, and many other sciences.

Geography must not continue to be what it has so long been—as taught in schools—a vast collection of more or less unrelated facts about things on the earth; it must be a portion of the science of geography as defined by the authorities in this field.

II. Geography defined:

The scope and content of geography is perhaps best indicated by the generally accepted definition: "Geography is the study of the earth in its relation to man and life;" or, more fully, "Geography is the exact and organized knowledge of the distribution of phenomena on the surface of the earth, culminating in the explanation of the interaction of man with his terrestrial environment."

Geography as thus defined involves, at any stage in one's progress in the study, the consideration of the relations of two great subjects—the earth and man. The study of geography therefore means that the "causal relation" between life and the earth shall be constantly kept in mind and that the interactions of causes and consequences shall be increasingly brought out. This causal relation is the keynote that binds the several factors of geography together as a science.

III. The unity of the subject:

The scientific definition of geography merely gives us a measure with which to judge the value of facts suggested for a course of study.

From the educational standpoint there should be no break in the unity of geography teaching from the kindergarten through the university. At every stage the work should be so arranged that what has been previously studied is a necessary foundation for the present work; the work of the moment must in the same way be based on the work which has preceded and lead up to that which follows. This principle

should be followed as closely when we are considering the relation of large units of work, like that of one year to another or of the secondary to the elementary school, as it would be in the organization of a series of given lessons on one topic or even of the principal points in one lesson. In the latter case we would agree that good teaching required a well-ordered plan. Why should not this principle be followed as rigorously at all times, and for the same reason—because it is pedagogically strong.

IV. The importance of geographic principles:

Formerly we were satisfied if a child's mind was well stored with the facts of "sailor geography" which he had laboriously memorized. The recent emphasis in school work of the *reasons* for geographic facts has come to the front because we have seen that while the facts may change in quantity they remain true in quality, inasmuch as they are the results of certain world-wide general principles, as true today as they have been throughout all time.

Example: Geographic reasons for the growth of such a city as New York or Chicago.

V. The importance of a knowledge of geographical facts:

"The emphasis of principles as being the more valuable part of geography, should not, however, be taken to mean that facts must be omitted in geography . . . There is a certain minimum amount of geographical facts that a pupil must know by the close of the elementary course. Some of these—perhaps a larger part—can be the outgrowth of careful causal work. The remainder must be gained through deliberate map study and memory work. . . . The best summary of what is necessary on the fact side has been made by Professor Whitbeck ["Results to be expected from a School Course in Geography," *Journal of Geography*, April, 1905, pp. 149–155] as follows:

KNOWLEDGE OF LOCATION

'1. Given an unlettered map of the United States, on which the states are outlined, our grammar school graduate ought to be able to write the names of the states in their proper places. He ought to be able to do as much for the important divisions of South America, Europe, Asia and Africa.

'2. He should know the approximate location of the eight or ten best known rivers of the Mississippi system; three or four of the Pacific Slope rivers, and two or three of Canada: the three great river systems of South America; four or five of Africa, a half-dozen of Asia, two or three of the British Isles, of France, of Germany, and of Russia; also the Po and the Danube. He should, of course, know the rivers of the region in which he lives.

'3. He should know the location of such arms of the ocean as are highways of the world's great commercial movements.

'4. He should know the location of those islands and groups of islands that are real factors in the world's activities, or have a general historical interest.

'5. He should know the facts of position, direction of trend, etc., of the half-dozen most important mountain systems or mountain groups of North America; the Andes, Alps, Pyrenees, Apennines, Caucausus, Ural, Himalaya, and Altai; the location of a few of the most frequently mentioned peaks, such, for example, as Mt. Blanc and Mt. Everest.

'6 There are a few capes that are often mentioned, such as Horn and Good Hope, and their location is worth knowing.

'7 He ought to know something of the location of some twenty-five of the chief cities of the United States, what those cities stand for in our industrial and commercial life, and the advantages of their situation. There are twenty-five or thirty foreign cities whose location should be definitely known, and also something of what

those cities stand for. In addition to these, there are fifty or more other cities at home and abroad whose names ought to be familiar to the pupil. It is sufficient to know merely in what state or nation these are located.

'8. The facts to be gained from a study of physical, commercial, and political geography must be acquired mainly through a study of the relation of causes to consequences. Not all the possible facts in any of these three great divisions of geography ought to be incorporated in school work. Only the most important, either as permanent acquisitions or as a necessary part of the whole school course, can be studied in the elementary school. These facts are well given in almost any one of the latest school geographies and need not be itemized here. Care should be taken, however, that too many details are not introduced, for an overcrowded course is less valuable as a working basis than a meagre one. A teacher can develop a meagre course and make it rich and valuable, while an overcrowded course, which must all be covered, leads to a memorizing of mere skeletal facts without any comprehension of the vital connecting relations and principles.' "—Dodge and Kirchwey, pp. 6–12.

VI. Judgment and power to use the facts:

Besides these facts the pupil must acquire

1. The power to use these facts, to test their accuracy, to be skeptical concerning authors who try to overthrow the principles taught, to use references, atlases, gazeteers, books of description and commercial reports.

2. The power to test the clearness and accuracy of his own and other people's thinking.

It is necessary that the teacher in the grades (5-8) understand the point of view from which "Home Geography" and "The World as a Globe" have been taught in the third and fourth grades if he would build an intelligent course of study upon these two factors.

VII. The use of the map (From Calkins: Course of Study for the District Schools of Michigan):

For every region studied there is much information concerning position, form and boundaries, size, surface and drainage, that can be much better read from the map than it can from the text. This work should be done in the class and from good wall maps. The Sydow-Habenicht and Goode maps are excellent for this purpose. The work of map reading should be done at first under the teacher's direction and questioning. Organize your class into an imaginary exploring party and acquire in half an hour from the map information which required years of toil and the cost of the life of many a brave explorer to accumulate. As you sail in imagination up the Amazon or Nile or Mississippi, tell them by word and picture of the wonderful sights that would greet their eyes were they really sailing up those rivers. Make the symbols on the map speak of real rivers, mountains and plains. When the map has told all it can in this way, send the pupils to the text to read what it has to say. What it does say will mean something, even if only a repetition of what they have already found out from the map, because they are prepared to understand it. They will be surprised and delighted to know that they can write from the map as good and as full descriptions of surface and drainage as their text contains. Give them not one, but many chances to do this. Have them study carefully the text with the end in view of determining how much of the information given in the text could be acquired from a map.

VIII. The atlas or map habit (Calkins):

It is quite necessary that the child should learn while in school the location of many important places and physical features. It was formerly supposed that this could best be done by map questions and by giving long lists of places which were to be located on the map and the locations committed to memory. Those who have come through such a process know how useless it was and how, as soon as the drill ceased, these unassociated names and places began to slip away until now only those remain which we have since had occasion to use.

It is here suggested that instead of this abstract committing to memory, the teacher at this impressionable age start the pupils aright in the formation of the atlas habit. Whenever and wherever, in the preparation of a reading, history, or geography lesson, the pupil reads of a city, river, mountain or other geographical feature, the teacher should insist that he stop then and there and look up on his map the location of the place. Places located in this way have something with which they can be associated and will be remembered the longer because of this association. If the habit of consulting the map can once be formed in the grades, it will solve once for all the problem of location of places in geography study.

IX. The use of small outline or base maps (Calkins):

It is not enough that pupils should read maps, find the location of places upon maps, and cultivate the atlas habit. Pupils should express their geographical knowledge upon maps. The map should be a means of geographical expression as well as impression Pupils should make maps. This is usually done by having the pupils draw maps from memory. This practice has hardly a single argument in its favor. It serves to impress incorrect ideas of form rather than correct ideas because pupils cannot draw correct maps and in thus drawing maps from memory the mistakes are fastened in the pupils' mind as well as correct ideas.

Instead of memory maps provide the pupils with small outline maps showing the boundaries of countries, the chief rivers, etc., but without names. If you wish to impress the shape of a continent, have the pupils trace over the coast lines with pen or pencil making them heavier. To teach rivers let them print the names of the more important rivers on the various rivers shown on the outline map. With colored pencils the pupils can color in the various countries whose boundaries are shown on the outline map. Symbols for cities may be located on the map and their names printed. The use of these maps more than anything else will tend to fix in the child's mind the main facts about the locations of the various countries, cities, rivers, etc., studied in these grades.

In the lower grades pupils are interested in activity for the sake of activity but in the intermediate grades the pupils are interested in activity for the sake of the result they get. They will usually be delighted to fill in and use these maps

The sand table, if used at all, should be used only as a means of expression by the child, and not by the teacher as a means of teaching new ideas and concepts. If the child has studied directly some alluvial fan, gully, or valley, the reproduction of his conception of it is an excellent means of fixing the concept clearly in his mind.

X. The use of text and supplementary readers (Calkins):

In most existing textbooks there is a mass of information, some of which may well be acquired from the map and not from the text. To distinguish between these two classes of information is a valuable exercise. To distinguish between and bring out the important points from the unimportant, to drill, illustrate, explain and supplement the text, is the function of the teacher. Teach the child to extract the meaning from the printed page without committing it to memory word for word. There is

little in any text that needs to be thus committed. Don't expect the child to know every city, stream, mountain peak and range that the text mentions. Let him locate them on the map as he reads about them, for the sake of the atlas habit which you are to cultivate, but don't expect that all will be remembered. Study the most important cities and physical features so thoroughly that they cannot be forgotten.

Lack of space has made it necessary for the authors of grade texts so to boil down the subject matter which they present that it is little more than a skeleton of geographic knowledge. To give life and interest to these dry bones of fact, the teachers and school boards are urged to provide the pupils with geographical readers. A single set is better than none and if the teacher can get it in no other way she should purchase it herself and cons der it as part of her outfit for teaching. The information she will get in this way will more than repay in satisfact.on for the money invested. Clippings from newspapers and articles from magazines may be ac umulated in unlimited quantities and at little expense. Every effort that is possible should be made to clothe the bare facts of the text with the life and interest which the study of geography ought to inspire.

XI. The use of the project and the problem:

Throughout the detailed outlines for the several grades, suggested problems for intensive study are given, and some projects are named. To write a guide book for France after France has been studied in the fifth grade is a project that will serve for summary and review purposes. The following characteristics for a good problem in geography were formulated by Miss Mary Watson, seventh grade teacher in the Towson High School; they were presented to a group of seventh grade teachers, discussed by them, and accepted as a standard for judging the worth of a problem.

Characteristics of a good problem:

I. It must be interesting to the pupils.

1. This will be true if the problem grows out of some geographical relation in connection with some previous work in geog aphy. Take, for example, the statements:

"There are less than seven persons to the square mile in South America."

"There are nearly one hundred twenty-five persons to the square mile in Europe."

"Europe is the most densely populated of the continents."

From these statements the problem "Find out why Europe is the most densely populated of the continents," can be deduced, and should be an interesting one for study.

Again, if Asia has been studied, the approach to the study of Europe might be made by way of Russia or Turkey, for no study of Asia, no matter how cursory, should fail to arouse interest in either the great Russian Empire or in Turkey.

2. It will be interesting, too, if it has grown out of some natural, social or political event happening within the child's own experience.

II. It must make the class think:

1. This would necessitate the recall of geographical facts already fixed from past geographical experiences.

In developing the first big topic that would naturally grow out of the problem regarding "Europe and its density of population," the class might be led to recall the

facts learned about South America and the bearing of these facts upon the development of that continent; to make comparisons; and to form conclusions to fit the situation in Europe. One would expect the class to decide that the first big topic in the study of Europe is:

"The bearing of location upon development of Europe."

(2) It will necessitate the finding out of the "Why" and the "How" of facts and of geographic relations:

It is not enough for the child to discover that when a country lies in the Temperate Zone it means the advantage of growth and development for that country. The mass of Europe lies in the Temperate Zone—He must also find out *why* being in the Temperate Zone means growth and development. He must work out for himself that a country lying in that zone is in the path of the S. W. Westerlies, which are rain-bearing winds and therefore make the great plain region of Europe one of the most extensive agricultural regions in the world. He must know not only that the location of Europe is central in the world land-mass and that she is bordered by the Atlantic Ocean and the Mediterranean Sea, but also that these factors have had great influence upon her commerce, colonization, settlement, and industries.

(3) It will involve comparison and selection.

The finding of differences is a very important matter where generalizations are concerned.

III. A good problem necessitates the gathering of information from texts, maps, graphs, pictures, observation, experiments, source material, individuals, museums.

IV. It leads to the modification of generalizations or the making of new generalizations, and the testing of those generalizations by application to specific situations. For example:

The statement:—

"England's rich deposits of coal and iron have had much influence on her development and her population," should bring out the generalization:

"A country rich in coal and iron will be progressive. But so far China is an exception to this rule."

V. It necessitates the study of many related problems. Examples:

1. Why are Europe's highlands an advantage?
2. How has Europe's great plain region made for development and settlement?
3. Why is England one of the most densely populated countries of Europe?
4. Why is Russia one of the least densely populated countries of Europe?

VI. A good problem needs maps, graphs, modeling, for illustrative purposes.

VII. A good problem furnishes ground for discussion and debate.

FIFTH GRADE

Read "Teaching of Geography in the Grammar Grades: Some Suggestions," pp. 189-194 carefully many times during the year.

Consult your Institute lecture notes (1913, 1914, 1915,) taken during Mr. R. D. Calkin's course in geography.

In the fifth grade the continents are studied in a more logical outline than in the fourth, and related fact accumulations are of great importance. In addition to latitude and longitude the names and positions of the windbelts of the world are studied.

The subject matter here outlined is arranged on cyclopedic form purely for the teacher's convenience. It should be taught in any order the teacher wishes, She will of course be guided by the class-room project in her topic for the lesson attack.

I. Principles of geography:

"The pupil's memory is now very active. Things learned at this time are long remembered. Now the child is learning the multiplication table in arithmetic. Now is the time to fix the basal facts of place geography, such as the names and locations of countries, cities, rivers, mountains, etc., but do not attempt to do this by having long lists of places committed to memory, but grow out of the regular work by the cultivation of the atlas habit and the use of base maps."

1. *Globe lessons:* (Calkins)

a. Continents and oceans:

In Comparative Geography of the third grade, pupils have had stories and descriptions of regions selected from all continents. The first step in globe lessons should be to develop the idea that we live on a round earth and that its surface is divided into large land masses called continents and large bodies of water called oceans. As the teacher points to the symbols for the continents and tells the pupils that this symbol stands for the continent on which they live, or for Europe or South America, and lets the pupils tell what they know about these regions, the symbols will come to stand for real places in which real people live. Bring out the general shape of the continents, the larger seas, gulfs, bays and rivers. Drill on the globe until every pupil knows and can point out on the globe the continent and more important countries.

b. Directions on the globe:

In the maps of the schoolroom and school grounds used in the third grade, directions were indicated by an arrow which pointed north. Develop the idea that direction symbols on the globe are meridians and parallels; that two places are north and south from each other only when they are on the same meridian, or east and west from each other when on the same parallel. Drill on the use of meridians and parallels for telling directions until every pupil tells directions on the globe easily.

c. Latitude and longitude:

On the maps of the schoolroom pupils have located their seats in the room by saying that their seats are so many seats east or west and so many seats north or south from some other seat. On the map of the school district they have described the location of their homes by saying that they live a certain number of miles north or south and a certain number of miles from the schoolhouse. In a similar way places are located on the globe by giving the number of degrees that a place is east or west from the prime meridian and north or south from the equator. Drill, drill, drill upon this matter of latitude and longitude until every pupil can locate places where their latitude and longitude are given or find the latitude and longitude of places from the globe. Easy numbers, multiples of ten for latitude and fifteen for longitude should be used, such as 40° N. and 60° W.

d. Size of the earth:

Every globe has a scale of miles. It may be found by dividing the circumference of the earth in miles by the circumference of the globe in inches. The quotient will be the number of miles to the inch on the globe. With a strip of paper let the pupils measure the distance on the globe in inches between many places

and then change this to miles by multiplying by the number of miles to each inch. In this way have the pupils find the length and width of the con inents as they are studied, and other distances.

e. Motions of the earth:

(1) Rotation. Do not attempt to prove that the earth rotates but give instead some consequences of rotation such as: Succession of day and night, the day as a unit of time, and how our life and habits of work and rest are regulated by the alternating periods of darkness and light.

(2) Directions. North is toward the north pole, south is toward the south pole. The poles are the ends of the earth's axis. The axis is the line on which the earth rotates or turns. If there were no rotation there would be no axis, no poles, and no directions. Do not say to the children, "Up" for north, and "Down" for south. Say instead 'North' when you mean north and 'South' when you mean south.

(3) Revolution. This motion cannot be proven to the children. All that can be done with it is to say that the earth does go around the sun and that the time it takes to do this is called a year. Above all things do not teach that revolution causes seasons when it is but one of the three or four different factors that cause seasons. Instead of trying to show the effect of revolution in helping to cause seasons, review how the long days and steep rays make the summers warm and short days and slanting rays make the winters cold as the pupils discovered in the third grade from their observations.

f. Climatic conditions on the earth.

The basis for this work has been laid in the observation study of seasons and weather in the third and fourth grades. Review what the pupils there learned from observation as to the relation of high sun and low sun to the warm temperatures of summer and the cold ones of winter. If the teacher will now carry the class in imagination to the equator and tell them where the sun rises and sets and where it is at noon at various times during the year, emphasizing the steep rays which always fall here, the pupils from their own experience with steep rays and a high sun ought to infer the hot temperatures of this region. Then carry them again to the "land of the midnight sun" with its slanting rays and low sun and let them infer the conditions of temperature there.

Teach the hot moist climate that is found in the doldrum belt near the equator, bringing in the daily rains of that belt. As typical of the weather in this belt some hot, sultry day in May or June should be selected in the home region, when in the afternoon there is a heavy downpour of rain from some passing thunderstorms. Contrast with this rainy belt the hot, dry regions on either side over which the trade winds blow making such deserts as Sahara, Kalahari, and the one in Australia. Now contrast with the uniformly hot and dry climate of the deserts or uniformly hot and moist climate of the doldrum belt, the variable weather of the temperate zone as it has been observed by the child. Yet, even with all its variations and changeableness there are certain types of weather prevailing for a short time in every district of the state which may well characterize all the great types of climate in the world.

II. Fact geography and continent study:

Approach the study of each continent through the physical map. Teach the continents as the homes of the many people of other lands studied in lower grades.

Use pictures, lantern slides, and other illustrative material to make the study as vivid as possible.

Avoid treating the fifth grade child as if he were the seventh. Make the work largely fact work but *related* fact work. If problems are used let them be very simply treated.

The following outline should be in the teacher's mind when presenting the study of any continent to a class but the order of the topics is not arbitrary. Sometimes a continent might be approached better through the child's immediate environment; sometimes through the study of pictures, with the industries, food, shelter, clothing, climate, etc., developed from the illustrations; but whatever the approach, at the close of the study the logical outline should be made as follows:

1. *Outline for study:*

a.

(1.) Position: in hemisphere; in zones; from continents; from oceans; between parallels; between meridians.

(2.) Form: relative; actual; as shown by map, with indentations and prolongations.

(3.) Size: *relative*, in relation to other continents and to ocean areas; *actual*, number of square miles.

(4.) Relief: primary highlands, position, extent, elevation.

b.

(5.) Climate: winds over ocean or land, from warm to cold, or cold to warm latitudes; prevailing direction, whence it came.

Rainfall—where and why; where not and why.

(6.) Drainage—rivers, seas, lakes.

c.

(7.) Vegetable life.

(8.) Animal life.

(9.) Mineral resources.

(10.) People.

d.

(11.) Distribution of population as dependent upon possibilities of productive occupation.

(12.) Productive occupations as dependent upon resources, supply and demand, and commercial advantages.

(13.) Development and location of centers of population.

(14.) Development of commercial and trade routes.

2. *North America.* (Studied as suggested.)

3. *The United States.*

Its sections: New England, Middle Atlantic, Southern, Central, Western; largest cities of each section; data to be drawn from newspaper reports; productive areas; study of the typical industries of each section from the geography point of view. Seldom does the study of processes in the industries contribute to geographical knowledge; these should be studied in connection with industrial arts which closely correlates with geography.

4. *South America.* (Studied as suggested.)

5. *Europe.* (Studied as suggested.)
6. *Asia.* (Studied as suggested.)
7. *Africa.* (Studied as suggested.)
8. *Australia.* (Studied as suggested.)
9. *Correlate the geography with the other subjects* that aid in explaining the social, industrial and commercial conditions of the life of man today.
10. *Newspaper current events will include the whole world as the field of social interest,* and may be made the starting point for the study of continents, countries, or industries.

III. Some suggestive approaches to study of the continents, made by the members of the revision committee. (Arranged by Anna C. Padian, Evergreen School, and Dena Aitcheson, Fullerton School.)

1. South America:

a. Through changes in trade conditions:

Problems:

(1) To find out what products of South America are needed most in North America.

(2) To find out how this transfer of trade from Europe to America will affect the development of South America: (a) European war. (b) Completion of canal.

b. Through study of pictures showing industries.

Problems:

(1) To find out what parts of South America are like our own country. Why?

(2) To find out why South America was so long in developing even though longer known than North America.

c. Through study of the three great valleys, highlands, and river systems:

Problem:

(1) To find out conditions in the three regions and how their products and industries differ.

2. Europe:

a. Through imaginary trips through Europe.

Problem:

(1) To find out which country you would prefer to live in and why.

b. Through children's forefathers.

Problem:

(1) To find out how they lived at home and why they left their native lands.

c. Through study of British Isles, the leading power of the world.

Problems:

(1) Why are the British Isles the leading power of the world?

(2) To find out how its location has affected its life and progress.

d. Through its many industries.

Problem:

(1.) To find out in what ways its products help to shape the commerce of the world.

3. Asia:

a. Through study of principal industries.

b. Through industries which affect us.

Problems:

(1) To find out what products of Asia are in greatest demand in our country.

(2) Why is labor so cheap in Asia?

c. Through Siberia as a part of Russia.

Problem:

(1) The possibilities of its growth and development under more favorable governmental conditions.

d. Through study of Asiatic people.

Problem:

(1) To find out that the people of southwest Asia live in practically the same way as in the time of Christ, and why this is so.

e. Through a study of Japan as the only World Power in Asia.

Problem:

(1) Why is Japan the leading country of Asia.

4. *Africa:*

a. Through recall:

(1) Of history—Joseph, Alexander, Magellan.

(2) Of globe facts—latitude, wind belts.

(3) Of life—people, animals, and plants.

Problems:

(1) To find out if there is any hope of ever reclaiming the Sahara Desert.

(2) What is the negroes' position or place in their own land?

b. Through the circus and pictures of native animals.

Problems:

(1) Why are so many large animals found there?

(2) Why are they not found in other lands?

c Through European interests in the Dark continent.

Problems:

(1) To find out which European nations got first foothold, and how?

(2) What attracted them?

(3) What were some of the difficulties they encountered?

d. Through recall of Livingston and Stanley.

Problems:

(1) Why were they so determined to penetrate the heart of Africa's jungle?

(2) What was their object in remaining?

5. *Australia:*

a. Through study of the sheep industry.

Problems:

(1) Why the finest wool in the world comes from Australia.

(2) Why most of the products of Australia are sent to England.

b. Through early history of the country.

Problem:

(1) To find out what attracted the early settlers.

c. Through study of coral reefs.

Problem:

(1) To find out how these reefs affect the trade routes.

d. Through pictures of animal and plant life.

Problem:

(1) Why are the animals and plants of Australia different from those of other countries?

TEXT: Tarr and McMurry, Book I; Part II; *Supplementary:* Chamberlain, *The Continents and Their People*, Macmillan Co.; Carpenter, *Geographical Readers;* Carpenter, *Readers on Commerce and Industry;* Huntingdon, *Asia:* Sutherland and Sanford. *Our Own Country and Her Possessions*, Silver, Burdett & Co.

REFERENCE BOOKS: Dodge, *Advanced Geography*, Rand, McNally & Co.; McMurry, *Type Studies from United States Geography*, Macmillan; Tarr and McMurry, *Larger Types*, Macmillan; McMurry, Charles, *Special Method in Geography*, Macmillan; Johnson, *Mathematical Geography*, A. B. Co.; Smith, Russell, *Commercial Geography*, Holt & Co.; Dodge and Kirchwey, *The Teaching of Geography*, Rand, McNally & Co.; Brooks, *The Story of Cotton*, Rand, McNally & Co.; Fairbanks, *The Western United States*, Heath & Co.; Hotchkiss, *Cities of the United States*, Houghton Mifflin.
Magazines: Journal of Geography, National Geographic Magazine.

SIXTH GRADE

Read carefully "Teaching of Geography in the Grammar Grades: Some Suggestions," pp. 189-194, many times during the year.

Consult your Institute lecture notes (1913, 1914, 1915) taken during Mr. R. D. Calkin's course in geography.

The subject matter here outlined is arranged in cyclopedic form purely for the teacher's convenience. It should be taught in any order the teacher wishes. She will of course be guided by the class-room project in her topic for the lesson attack.

I. Principles of Geography:

At the beginning of the sixth grade, when the second or advanced book is usually taken up, it is recommended that a more detailed study of the physical factors and forces of geography be made than has heretofore been possible. The attention given to this side of geography in the previous grades has been more to the securing of good, clear, mental pictures of physical features and the acquisiti n of facts than to the explanation of those features and facts. In this second study of physical environment, emphasize the processes concerned and the forces at work in producing that environment. (Calkins.)

The sixth grade gathers into a detailed study of surface and climate all the facts that have been accumulating in the three previous grades and organizes these, showing the relationship between the factors of surface, climate, and the life of man. These facts are applied mainly to the continent of North America—first to the continent as a unit, then to its different regions, and finally to its political divisions. So life in North America as a whole, then in Canada, in Mexico, in Central America, and in the United States and its dependencies is seen in relationship to (1) position, form, size, and surface; (2) climate; (3) vegetation; (4) occupation; (5) distribution of population; (6) commerce.

NOTE. The greatest elimination of pupils from the grades takes place in the sixth grade. A child going out into the world with the geographical knowledge accumulated from the fourth grade through the sixth should have a real equipment to start with in life.

I. Physical geography (Calkins):

In most texts used this work will include the following topics:

1. Shape and size of the earth:

Some proofs of the earth's shape may now be given with hopes of their being understood. Sailing around the earth and the appearance of ships at sea, as usually stated, prove only curvature. State them so they prove equal curvature in all directions. Even here these proofs mean very little unless they can be actually experienced. Let the child see that the size of the earth is an important factor; that because of its size, and its great barriers of oceans and mountains, the people of the earth have been separated and isolated from each other; and that because of

this separation and isolation there have arisen differences of language, customs, manner and race. Latitude and longitude are measured in degrees and not miles, because the earth is curved. As we move north or south over the earth, new stars rise above or sink below our horizon and from their change of position we are able to find our latitude.

2. Motions of the earth:

a. Directions as a result of rotation. Reemphasize the fact that it is rotation which makes the finding of direction possible. Various methods of finding the north pole star and Great Dipper; shadow at noon; point the hour hand of a watch towards the sun, then half way between the hour hand and the figure twelve on the dial will be south; the compass points towards the north magnetic pole and not towards the true north pole. It does not always point north therefore, but in Michigan it varies but little from true north.

b. Longitude and time—standard time; international date—Show how a spherical earth rotating causes the sun to rise and set and cross the various meridians at different times, and how, by knowing this difference of time between places, we can find difference of longitude. Emphasize the fact that because the earth is spherical and rotates from west to east, sunrise, noon, sunset, midnight, and with it the new day, all come from the east, that New York has sunrise, noon, sunset and the new day before Detroit, and that the new day begins at the 180th meridian or the international date line and travels around the world to the west ending again at the date line when midnight reaches it. All of this, together with the length of the day, is a consequence of rotation.

c. Seasons—

In the third grade the pupils learned from observation that summer is warmer than winter because its days are longer, its nights shorter, and the sun's rays steeper. The explanation of why the days are longer and the sun's rays steeper in summer than in winter is too difficult to be attempted until now. It is believed that in connection with the motions of the earth it can now be shown why this is so and why we thus have change of seasons.

3. The atmosphere:

a. Its composition, pressure, etc.

b. Water vapor. How it gets into the atmosphere and the conditions governing the rate of evaporation; how it gets out of the atmosphere and the various forms into which it condenses—fog, clouds, dew, frost, rain, snow, hail.

A common error in teaching the relation of mountains to rainfall is here to be guarded against. The usual statement is that the wind blows against the cold side of the mountains, is cooled, and its moisture condensed into rain or snow. If this were the cause the vapor would gather from the atmosphere upon the cold rocks as dew or frost and there would be no rainfall.

Whenever a gas is compressed it is heated as one may see by noticing how quickly a bicycle pump becomes heated in pumping up the tires. When the pressure upon a gas is suddenly decreased it expands and becomes cool, as all know who have noticed how cool the air is as it escapes from the valve in a bicycle tire. Now, when air moves up a mountain slope it is rising into regions with less air pressure. As the pressure upon the rising air decreases it expands and cools just as does the escaping air from the bicycle tires. It is this cooling which causes the condensation into rain or snow. It is called cooling by expansion and is the chief cause of the cooling which produces rainfall everywhere.

c. Air temperatures:

(1) How distribution of temperatures over the earth is represented on a map by isotherm lines.

(2) Causes of unequal temperatures between the equator and the poles.

(3) Causes of unequal heating of sea and land.

CAUTION—The high temperatures of Western Europe and Western North America are due more to the unequal heating of sea and land than to the Gulf Stream and other currents. In winter the ocean is warmer than the land and would be were there no ocean currents. Winds blowing from the west carry these moderating temperatures to the west coast of Europe. If the prevailing winds blew from the east the British Isles and Newfoundland would exchange climates. Put the emphasis upon unequal heating of land and sea and the prevailing winds rather than upon ocean currents.

d. Winds:

(1) How unequal heating of the air causes it to circulate and winds to blow.

(2) Teach thoroughly the location, direction of wind, and other characteristics of the following wind and calm belts: The trade winds, the doldrum belt, the horse latitude calm belts, the westerlies.

Constantly be on the lookout for conditions in local weather which illustrate the types of weather found in these various regions.

(3) Show how migration of these belts causes wet and dry seasons—as in California and regions near the equator.

(4) Monsoons—due to unequal heating of land and sea in winter and summer.

(5) Land and sea breezes due to unequal heating of sea and land by day and night.

(6) Cyclonic storms and how they control weather in the temperate zones.

e. Weather:

"It is time that the schools do something to destroy the superstition and ignorance that prevail as to the cause of weather and weather changes. The moon does not control weather, there is no equinoctial storm, and no one can at present foretell weather accurately a year, or even a month in advance. Teachers should look up this topic and be able to explain the weather changes as they occur. Write to the nearest weather bureau station and ask that the daily weather map be sent to your school."

4. The ocean and ocean movements:

The oceans, their extent, depth, nature of their bottoms, wind waves, tides, and the chief ocean currents. The relation of wind to waves and to ocean currents should here be brought out. Show also how the currents generated by the winds are deflected by the continents into their present courses.

5. Rain and river erosion and land forms:

Teach by observation in the neighboring fields how the water running off after a storm erodes gullies in the hillsides, how these gullies grow wider, deeper and longer with each storm until they are finally cut to the depth at which water stands in the ground when they thus acquire permanent streams. Show by example if possible how these valleys are at first narrow and V-shaped, often with falls and rapids and lakes in their courses; how in this condition they are said to be young valleys, but the side wash on their sides and streams in their bottoms destroy the falls, fill up and drain the lakes and, swinging from side to side, cutting on the outside of each curve and depositing on the inside, gradually widen the valley bottom forming flood plains, the valley thus passing into maturity and old age. Take up the other erosional forms of the text found in the neighborhood and give the pupils as clear conceptions as possible of how the weathering and erosive forces sculpture the surface of the land into all its varieties of form.

6. Glaciers and glaciation:

Introduce them to the mountain and valley types of glaciers now existing in many regions, showing the various phases of erosional work of these glaciers, how they smooth, polish and striate the rocks over which they pass and how they form moraines along and across their valleys. Now search the clay bank along streams, the excavations for cellars and ditches, to find rocks in the home region which have been smoothed, polished, and striated by the glacial erosion, thus proving that their region was once beneath an immense ice sheet which brought and distributed over this region the thick deposits of drift upon which they live. In this grade when the United States is studied more intensively and in greater detail, give them some idea of how the Great Lakes and the thousands of smaller lakes in northern United States were produced as a result of this glaciation, thus bringing out the relation of the effects of glaciation to man.

7. Coast lines and the various forces and agents at work in changing them.

II. Conditions that determine climate: A formation of the principles and factors involved.

III. Fact geography and detailed continent study:

1. North America: (an intensive study):
   a. As a whole.
   b. United States and its dependencies.
   c. Maryland.
   d. Canada.
   e. Mexico.
   f. Central America.
   g. Outlying islands that are not dependencies.

IV. The following outline is suggested as a point of view for working out a detailed study of the United States in the sixth grade:

Look over the material on the United States in the textbook for the grade. Rearrange the material on the United States as follows:

1. Physical regions:
   a. Appalachian region.
   b. Mississippi valley.
   c. Rocky Mountain region.
   d. Pacific coast region.

2. Study each region separately. The following outline for the Appalachian Region is a sample procedure—

a. Let the children look through the geography, and tell on which pages the material for the Appalachian region can be found. (This will include the material on New England, the Middle Atlantic States, and part of the Southern States.)

b. Let them again look at the graphs and illustrations on those pages and find out what prominent features of the Appalachian Region are there represented. Make a list of these.

c. From this list let the class decide in which feature it is most interested. It may be dairy products; or lumbering; or coal; or manufacture; or pleasure grounds.

d. Then let the children try to formulate for the industry, or city, or physiographic feature (whatever it is they have chosen to study) a problem that will be worth while hunting out an answer for.

e. Then let them decide upon what topics they must concentrate attention to answer the problem.

f. Then either through the index or by reading through all the pages on the Appalachian Region let them gather the data for each topic they are to study—taking one topic at a time, of course.

g. If a prominent city is necessary for the understanding of the problem, include it as one of the topics, and study it in detail when it is reached in the outline.

h. Wherever climatic conditions are necessary for the understanding of the problem, stop and teach any new element that is presented or review old ideas that seem vague. (Remember that fifth grade children should understand windbelts and zones so that you do have something to build upon in the sixth grade.)

NOTE: Things to do that you probably have not done before.

a. Ignore sections by states.
b. Study an important city as you study its region.
c. Parallel the study of type industries with the study of the region.

V. Maryland; a detailed study:

1. Location in latitude and longitude.
2. Area.
3. Physiography.
4. Climate.
5. Products.
6. Occupations and industries.
7. Commerce.
8. Cities.
9. Baltimore County in relation to the whole state.
10. Baltimore City as a manufacturing and commercial center: its rank.
    a. Location.
    b. Harbor.
11. Raw materials received into Maryland.
12. Manufactures.
13. Raw materials and manufactured articles sent out of Maryland.
14. Railroad lines.
15. Steamship lines.
16. Ten cities of the State besides Baltimore City.

NOTE: It is not necessary to follow this outline strictly; the approach might be made by studying the state in sections, as is done for the United States. That plan would mean an industrial or commercial problem to be worked out for each section.

VI. Aids to the teaching of geography: pictures, globe, graphs, etc.

VII. Current events: the necessity for using newspaper and magazine articles.

TEXT: Tarr and McMurry, Book I, Part I; Tarr and McMurry, *Maryland Supplement*, Twitchell.

SUPPLEMENTARY: Carpenter, *North America;* Carpenter, *Readers on Commerce and Industry.*

REFERENCES: Dodge, *Advanced Geography;* McMurry, *Type Studies from United States Geography*, Macmillan; McMurry, *Larger Types*, Macmillan; Adams, *Commercial Geography;* Gannett, Garrison and Houston, *Commercial Geography;* Sutherland and Sanford, *Our Own Country and Her Possessions*, Silver, Burdett & Co.; Coe, *Our American Neighbors*, Silver, Burdett & Co.; McMurry, *Special Method in Geography*, Macmillan; Dodge and Kirchwey, *The Teaching of Geography*, Rand, McNally & Co.; Russell Smith, *Commercial Geography*, Holt & Co.; Winslow, *Geographical Readers;* Longmans, *Atlas:* Hotchkiss, *Representative American Cities*, Houghton, Mifflin & Co.; Brooks, *The Story of Cotton*, Rand, McNally & Co.; Fairbanks, *The Western United States*, Heath & Co.

SEVENTH GRADE

Read "Teaching of Geography in the Grammar Grades: Some suggestions," pp. 189-194, carefully many times during the year.

Consult your Institute lecture notes (1913, 1914, 1915) taken during the course in geography under Mr. R. D. Calkins.

In the seventh grade the *explanatory stage* of the work is reached and the children are trained to seek out problems that ask "Why certain effects are produced." The statements of the text provide much of the necessary problem material that will serve as a stimuli for the questioning mind of the pupil.

The continent studies included in this grade are South America, Europe, Asia, Africa, and Australia. It is suggested that the teacher should not expect to study in detail more than four problems on any one continent, except Europe, and that Africa and Australia are to be studied as the colonizing ground of European peoples, in the main.

A detailed study of weather maps showing how *highs* and *lows* cause weather changes and a detailed study of rotation and revolution of the earth are a part of the work of this grade.

The subject matter here outlined is arranged in encyclopedic form purely for the teacher's convenience. It should be taught in any order the teacher wishes. She will of course, be guided by her class-room project in her topic for the lesson attack.

I. Principles of geography (Calkins):

In most of the texts in use this work will include the following topics:

1. Shape and size of the earth:

Some proofs of the earth's shape may now be given with hopes of their being understood. Sailing around the earth and the appearance of ships at sea, as usually stated, prove only curvature. State them so they prove equal curvature in all directions. Even here these proofs mean very little unless they can be actually experienced. Let the child see that the size of the earth is an important factor; that because of its size, and its great barriers of oceans and mountains, the people of the earth have been separated and isolated from each other; and that because of this separation and isolation there have arisen differences of language, customs, manner and race. Latitude and longitude are measured in degrees and not miles, because the earth is curved. As we move north or south over the earth, new stars rise above or sink below our horizon and from their change of position we are able to find our latitude.

2. Motions of the earth:

a. Directions as a result of rotation. Reemphasize the fact that it is rotation which makes the finding of direction possible. Various methods of finding the north pole star and Great Dipper; shadow at noon; point the hour hand of a watch towards the sun, then half way between the hour hand and the figure twelve on the dial will be south; the compass points towards the north magnetic pole and not towards the true north pole. It does not always point north therefore, but in Michigan it varies but little from true north.

b. Longitude and time, standard time, international date—Show how a spherical earth rotating causes the sun to rise and set and cross the various meridians at different times, and how, by knowing this difference of time between places, we can find difference of longitude. Emphasize the fact that because the earth is

spherical and rotates from west to east, sunrise, noon, sunset, midnight, and with it the new day, all come from the east, that New York has sunrise, noon, sunset and the new day before Detroit, and that the new day begins at the 180th meridian or the international date line and travels around the world to the west ending again at the date line when midnight reaches it. All of this, together with the length of the day, is a consequence of rotation.

c. Seasons.

In the third grade the pupils learned from observation that summer is warmer than winter because its days are longer, its nights shorter, and the sun's rays are steeper. The explanation of why the days are longer and the sun's rays steeper in summer than in winter is too difficult to be attempted until now. It is believed that in connection with the motions of the earth it can be shown why this is so and why we thus have change of seasons.

3. The atmosphere:

a. Its composition, pressure.

b. Water vapor. How it gets into the atmosphere and the conditions governing the rate of evaporation; how it gets out of the atmosphere and the various forms into which it condenses—fog, clouds, dew, frost, rain, snow, hail.

A common error in teaching the relation of mountains to rainfall is here to be guarded against. The usual statement is that the wind blows against the cold side of the mountains, is cooled, and its moisture condensed into rain or snow. If this were the cause the vapor would gather from the atmosphere upon the cold rocks as dew or frost and there would be no rainfall.

Whenever a gas is compressed it is heated as one may see by noticing how quickly a bicycle pump becomes heated in pumping up the tires. When the pressure upon a gas is suddenly decreased it expands and becomes cool, as all know who have noticed how cool the air is as it escapes from the valve on a bicycle tire. Now, when air moves up a mountain slope it is rising into regions with less air pressure. As the pressure upon the rising air decreases it expands and cools just as does the escaping air from the bicycle tires. It is this cooling which causes the condensation into rain or snow. It is called cooling by expansion and is the chief cause of the cooling which produces rainfall everywhere.

c. Air temperatures:

(1) How distribution of temperatures over the earth is represented on a map by isotherm lines.

(2) Causes of unequal temperatures between the equator and the poles.

(3) Causes of unequal heating of sea and land.

CAUTION: The high temperatures of western Europe and western North America are due more to the unequal heating of sea and land than to the Gulf Stream and other currents. In winter the ocean is warmer than the land and would be were there no ocean currents. Winds blowing from the west carry these moderating temperatures to the west coast of Europe. If the prevailing winds blew from the east the British Isles and Newfoundland would exchange climates. Put the emphasis upon unequal heating of land and sea and the prevailing winds rather upon ocean currents.

d. Winds:

(1) How unequal heating of the air causes it to circulate and winds to blow.

(2) Teach thoroughly the location, direction of wind, and other characteristics of the following wind and calm belts: The trade winds, the doldrum belt, the horse latitude calm belt, the westerlies.

Constantly be on the lookout for conditions in local weather which illustrate the types of weather found in these various regions.

(3) Show how migration of these belts causes wet and dry seasons—as in California and regions near the equator.

(4) Monsoons—due to unequal heating of land and sea in winter and summer.

(5) Land and sea breezes due to unequal heating of sea and land by day and night.

(6) Cyclonic storms and how they control weather in the temperate zones.

e. Weather:

It is time that the schools do something to destroy the superstition and ignorance that prevail as to the cause of weather and weather changes. The moon does not control weather, there is no equinoctial storm, and no one can at present foretell weather accurately a year, or even a month in advance. Teachers should look up this topic and be able to explain the weather changes as they occur. Write to the nearest weather bureau station and ask that the daily weather map be sent to your school.

4. The ocean and ocean movements:

The oceans, their extent, depth, nature of their bottoms, wind waves, tides and the chief ocean currents. The relation of wind to waves and to ocean currents should here be brought out. Show also how the currents generated by the winds are deflected by the continents into their present courses.

5. Rain and river erosion and land forms:

Teach by observation in the neighboring fields how the water running off after a storm erodes gullies in the hillsides, how these gullies grow wider, deeper and longer with each storm until they are finally cut to the depth at which water stands in the ground when they thus acquire permanent streams. Show by example if possible how these valleys are first narrow and V-shaped, often with falls and rapids and lakes in their courses; how in this condition they are said to be young valleys, but the side wash on their sides and streams in their bottom destroy the falls, fill up and drain the lakes and, swinging from side to side, cutting on the outside of each curve and depositing on the inside, gradually widen the valley bottom forming flood plains, the valley thus passing into maturity and old age. Take up the other erosional forms of the text found in the neighborhood and give the pupils as clear conceptions as possible of how the weathering and erosive forces sculpture the surface of the land into all its varieties of form.

6. Glaciers and glaciation:

Introduce them to the mountain and valley types of glaciers now existing in many regions, showing the various phases of erosional work of these glaciers, how they smooth, polish and striate the rocks over which they pass and how they form moraines along and across their valleys. Now search the clay bank along streams, the excavations for cellars and ditches, to find rocks in the home region which have been smoothed, polished, and striated by the glacial erosion, thus proving that their region was once beneath an immense ice sheet which brought and distributed over this region the thick deposits of drift upon which they live. In this grade when the United States is studied more intensively and in greater detail, give them some idea of how the Great Lakes and the thousands of smaller lakes in the northern United States were produced as a result of this glaciation, thus bringing out the relation of the effects of glaciation to man.

7. Coast lines and the various forces and agents at work in changing them.

II. Study of the continents:

1. South America:

a. Present physiographically in detail. (See outline for the Study of a Continent, Fifth Grade.)

b. Emphasize Argentina, Chili, and Brazil.

c. Some suggestive problems for study *outlined by members of the revision committee:*

(1) The mass of South America is in the Torrid Zone. Why is this unfavorable to the development of the continent?

(2) The highlands of the continent are on the border and the plains in the interior. In what ways is this favorable and unfavorable to the development of South America?

(3) Determine through the use of maps and texts the physical causes underlying the character and amount of vegetation in the selvas region, and on the savannas.

(4) Account for the two extensive arid regions on opposite sides of the Andes Highland. How have they affected the development of South America?

(5) Why are the largest centers of population found on the border of South America?

(6) Determine why Argentina is the most progressive country of South America.

(7) The foreign commerce of Buenos Aires in 1912 exceeded that of Rio Janeiro by three hundred million dollars. Account for the greater commerce of Buenos Aires.

(8) Find out why Brazil is the greatest coffee raising country in the world.

(9) What is the importance of the rivers of South America as highways of commerce?

(10) Why are there so many volcanoes in the Andes Highland, many of which are still active, and what has been their bearing upon life in the region?

NOTE: These problems were, in the main, gotten from the text. The pupils should read the text carefully for statements that develop thought-provoking questions. Example:

a. "The cultivation of coffee has proved so successful that Brazil now produces more than one-half the quantity raised in the world."

b. "The rubber industry is well developed in the tropical Andean countries (Peru, Ecuador, Colombia, Bolivia)."

c. "Argentina is the most advanced of the South American countries"

d. "Brazil produces more than one-half the coffee used in the world."

e. "Brazil is the chief coffee-producing country in the world."

f. "Argentina is the leading country of South America."

g. "Argentina is most advanced of South American countries."

h. "Chile is the most important republic on the Pacific Coast of South America; and rivals Argentina in progressiveness."

2. Panama Canal: a detailed study.

(a) Suggested problems.

(1) What commercial and military benefits does the United States government expect to derive from the completion of the Panama Canal?

(2) What will be the bearing of the Panama Canal on the development of the countries of South America?

3. Europe:

(See outline for the Study of a Continent, Fifth Grade course of study.)

a. Physiography, coastal configurations.

b. The Central Alps. Source of rivers. The Great Plains of Europe.

c. The lesser mountains and peninsulas of Europe and the division into separate nations.

d. The British Isles: Physical character and conditions of the British Isles. Effects of isolation.

e. Some statements in the text that might lead to the developing of thought-provoking questions from the pupils:

(1) "In spite of its small size Great Britain is in many respects the most powerful and most important country in the world."

(2) "Far too little food is produced in the British Isles to feed the people."

(3) "Great Britain has become one of the leading iron and steel manufacturing centers in the world."

(4) "In spite of the limited supply of food, France is a great manufacturing country."

(5) "The position of the highlands of France is favorable to commerce as well as to farming."

(6) "Paris, the capital of France, is the largest city on the continent of Europe, and the third largest in the world."

(7) "Their [the French] artistic taste has had great influence upon the kind and amount of manufacture."

(8) "In these days of railroads Germany's central position is superior to that of England for trade."

(9) "For transportation of goods Germany is especially favored by her rivers. There are also many canals and railroads."

(10.) "Such a climate, together with a fertile soil, helps to explain why agriculture is the principal industry in Italy."

(11) "There is more manufacturing in Italy than one might infer from the lack of fuel. Why?"

(12) "Italy is the very storehouse of art, whether architecture, painting, or sculpture, be considered."

(13) "With the exception of Rome and Naples, the large cities of the Italian peninsula are in the northern part of Italy. Why?"

(14) "In spite of its vast extent, the development of Russia is greatly hindered by lack of good harbors."

(15) "Russia in Europe is larger than all the other European countries put together. Russia is slightly advanced in some directions. Why?"

(16) "More goods are shipped from St. Petersburg than from any other Baltic port."

(17) "Odessa, an important seaport, is an important flour-milling center, like Minneapolis."

(18) "The Austrian people have long been extensively engaged in manufacture but do not however manufacture nearly as much as Great Britain, Germany, or France."

(19) "There are many different kinds of people in Austria-Hungary, with very different customs and languages. Why?"

(20) "While there are many small cities in this empire, there are surprisingly few large ones."

f. Some suggested problems:

(1) What physical factors have helped make Europe the most progressive of the continents?

(2) Account for the commercial interdependence of the United States and Europe.

(3) In what respect does Great Britain hold first rank among the nations? Account for her greatness.

(4) To find out how the artistic taste of the French people has influenced the character and amount of their manufacture and commerce.

(5) How does the position of the highlands of France influence both her agriculture and commerce?

(6) How has Germany's central position in Europe influenced her commercial and military standing?

(7) Account for Germany's high rank as a manufacturing nation.

(8) To find out why there are but 66 people to the square mile in Russia.

(9) To find out why the Rhine River is so important a highway of commerce.

(10) Compare Norway and Switzerland as to grandeur of scenery. What is the bearing of their highlands upon their industries, and the character of the people.

(11) To find out why Spain is one of the less powerful nations of Europe.

(12) To find out why Italy has been called the "treasure house "of Europe.

(13) To find out why London is the largest city in the world.

(14) To find out what claim Paris has to being the most beautiful city in the world.

(15) To find out what interest Rome holds for the tourist.

4. Asia:

(See outline for Study of a Continent, Fifth Grade course.)

a. European possessions in Asia: England—India; Russia—Russian Asia; Turkey in Asia; France—Indo-China; Holland—Dutch East Indies.

b. Chinese Empire.

c Japan.

NOTE: Hunt through the text for the significant statements and base the work of problem-thinking, both for teacher and pupil, upon these.

5. Africa.

6. Southern Seas:

Teach these two continents (incidentally) as they relate to Europe, Asia, and South America, commercially and industrially; and then treat them further as representing opportunities for independent study on the part of the child to discover the relations of the position and physical features of a continent to its development.

III. Current events, newspapers, magazines, pictures; these should be used in all lessons as far as practicable.

TEXT: Tarr and McMurry, *Book I, Part II.*

SUPPLEMENTARY: Carpenter: *Geographical Readers, Europe, Asia, Africa, and Australia.* (Remember that Carpenter's books were published twenty years ago, and much of the material is not brought down to date.) Huntingdon, *Asia,* Rand, McNally Co. Any good geographical reader.

REFERENCES: Brigham: *Commercial Geography;* Adams, *Commercial Geography*; Gannett, Garrison and Houston, *Commercial Geography;* Russell Smith, *Industrial and Commercial Geography,* Holt; Day, *History of Commerce,* Longmans; McMurry, *Special Method in Geography,* Macmillan Co.; Dodge and Kirchwey, *The Teaching of Geography,* Rand, McNally Co; Huntingdon, *Asia,* Rand, McNally Co.; *Baedeker Guide Books;* Singleton, *Famous Cities of Northwestern Europe,* Baker, Taylor Co; Singleton, *Famous Cities of Modern Europe,* Baker, Taylor Co.; Allen, *Industrial Geography of Central Europe;* Newbigin, *Geography,* Holt; Johnson, *Mathematical Geography,* A. B. Co.

SERIES OF GEOGRAPHICAL READERS: (Different Authors); *The World and Its People*, Silver, Burdett & Co.; Chamberlain, *The Continents and Their People*, Macmillan Co.; *Redway's Geographical Readers*, Scribners; *Carpenter's Geographical Readers*, American Book Co.; *Huntington's Asia*, Rand, McNally; *Readers on Commerce and Industry;* Carpenter, *How the World is Clothed;* Carpenter; *How the World is Fed;* Carpenter, *How the World is Housed.*

EIGHTH GRADE

Read "Teaching of Geography in the Grammar Grades: Some Suggestions," pp. 189–194, carefully many times during the year.

The text, Tarr and McMurry's *Complete Geography*, contains practically all the material that is printed in the separate texts for the fourth, fifth, sixth, and seventh grades, and, in addition, it includes Part VIII, which is a graphical and statistical review of the United States, comparing it with the other world powers. This Part VIII, then, should be made the working text for the eighth grade. This volume serves as a reference when information is to be looked up about a topic, and is, in a sense, an encyclopedia.

*A Summary of the Work of the Previous Grades**

A summary of the work of the previous grades showing what geographical knowledge the eighth grade child should have is as follows:

I. Principles of geography—

1. Emphasis has been placed upon map-reading and interpretation through third, fourth, fifth, sixth and seventh grades.

2. Emphasis has been placed upon globe use, chiefly in the fourth grade, and only such reference to globe study in the other grades as was necessary to establish relative positions.

3. The text-book, which gives more facts and shows more relations than the map, has been in use through the fourth, fifth, sixth, and seventh grades.

4. Reading latitude and longitude should have been made as automatic as the multiplication or addition tables in arithmetic. This was begun in the fourth and has been a part of the fifth, sixth, and seventh grade work.

5. Windbelts were begun in the fifth grade, the causes of wind taught very generally in the sixth, and in a more detailed and scientific way in the seventh.

6. Climate, as a detailed study, was begun in the sixth. Rainfall maps and isotherms were a part of the sixth grade work. These were used to build further climatic conceptions upon in the seventh grade, and the daily Weather Bureau map was studied in detail in the seventh.

*For detailed and valuable criticism and suggestions regarding this outline we are greatly indebted to Mr. R. D. Calkins, Head of the Department of Geography, State Normal School, Mt. Pleasant, Michigan. For the final arrangement and interpretations Baltimore County alone is responsible.

II. In subject-matter relating to the life on the continents the outline by grades, roughly, has been as follows:

1. Third Grade:

a. Fact and geographic experiences accumulated from the home environment and furnishing a basis for imagining the regions and the peoples of the world.

(1) Example of Home Geography: Where did we get our loaf of bread?

(2) Excursions: maps traced of route taken; (emphasis placed on map-using when visiting the home regions).

(3) Example of World Geography: Commodities from distant lands furnish a connection with home regions when teacher chooses. When other regions than the home are studied, the teacher choose certain type-regions unknown to child's environment: Sahara Desert for Africa; Switzerland for mountainous Europe; Amazon Valley for South America; Japan and China for Asia; Holland for Lowland Europe.

2. Fourth Grade: The fourth grade work opens with globe lessons which continue for from three to six weeks. The ideas giving meaning to globe symbols were partially gotten in the third grade type-region studies. The transition from reading the globe to reading the flat-map is a large part of the fourth grade work. Latitude and longitude lines are taught and used for directions mainly; east and west are traced upon parallels; north and south along meridians. Fact accumulations are kept up through continent study always, linked up with map-study and supplemented by the text.

3. Fifth Grade: In the fifth grade the continents are studied in a more logical outline; and in addition to latitude and longitude the names and positions of the windbelts of the world are studied. (For the outline followed for continent study in this grade see the Fifth Grade Course in geography.)

4. Sixth Grade: The sixth grade gathers into a detailed study of surface and climate all the facts that have been accumulating in the three previous grades and organizes these, showing the relationship between the factors of surface, climate, and the life of man. These facts are applied mainly to the continent of North America—first to the continent as a unit, then to its different regions, and finally to its political divisions. So life in North America as a whole, then in Canada, in Mexico, in Central America, and in the United States and its dependencies is seen in relationship to (1) position, form, size, and surface; (2) climate; (3) vegetation; (4) occupation; (5) distribution of population; (6) commerce.

NOTE:—The greatest elimination of pupils from the grades takes place in the sixth grade. A child going out into the world with the geograghical knowledge accumulated throughout these six years of school life should have a real equipment to start with.

5. Seventh Grade: In the seventh grade the explanatory stage of the work is reached and the children are trained to seek out problems that ask "Why certain effects are produced." The statements of the text provide many of the necessary problem materials that will serve as stimuli for the questioning mind of the pupil.

The continent studies included in this grade are South America, Europe, Asia, Africa, and Australia. It is suggested that the teacher should not expect to study in detail more than four problems on any one continent, and that Africa and Australia are to be studied in the main as the colonizing ground of European peoples.

A detailed study of weather maps showing how *highs* and *lows* cause weather changes and a detailed study of rotation and revolution of the earth are a part of the work of this grade.

EIGHTH GRADE OUTLINE

I. Principles of geography: A review; use as outlined above. See also course for the Seventh Grade, pp. 205–211.

II. Explanatory geography (based mainly upon a problem-review of the United States):

The subject-matter from which problems can be formulated is as follows:

1. Pp. 476–536, Tarr and McMurry *Complete Geography.*

2. In the current events of the region in which we live.—Reference: daily newspapers and Current Events Magazine.

3. In the industries of the United States and the local community, those industries that affect world commerce.

4. In the human factor in industry.—Search the community for industries that persist just because they once were lucrative though raw material and power have now to be imported. Ex.: Shoes in New England; gloves in Gloversville; yarn in Germantown; veneer in Mount Pleasant, Michigan.

5. In the detailed study of the relation of the geographical environment of some of the conditions met in the history topics of the grade. Ex.: The primitive life of the people on the mountains of West Virginia (the John Fox country); "Cotton is King" in the Civil War preliminaries; the part rivers in the Coastal Plain played in the Revolutionary War; early census reports.

III. Suggested problems as a basis for choice:

1. Text: p. 453. Compare the five largest nations in area with the five nations containing the densest population. Account for the density of population in each of the ten nations.

2. Text: p. 454. The United States produces more corn than any other nation in the world. Why is this and how does this production of corn affect the finances of the United States and the comfort of the world?

3. Sheep and cattle are important raw material for the world's existence. Note the distribution of the sheep and cattle grounds of the world, and discuss the activities growing out of these producing areas and the interchange of cattle and sheep commodities all over the world.

4. "England keeps her cows in Australia, Canada and Argentina; cultivates her wheat in Manitoba, the United States and India; grows her cotton in the United States, India and Egypt; spins it at home and in India, China, Egypt and Mexico; makes her machinery in Germany and the United States."—What effect has this upon the commerce of the countries mentioned?

5. Let us see why Maryland, which is one of the smallest states, produces more canned tomatoes than any other state in the Union.

6. Why should Maryland protect the oyster industry?

7. The United States supplies European countries with most of their raw cotton. Why then do we in turn buy most of the Egyptian crop?

8. Why is the development of the iron industry an index of a country's progressiveness?

9. Ought the United States government restrict the use of coal?

10. Let us see some of the difficulties to be encountered in the construction of the proposed railroad in Alaska, and the advantages to be derived from it when completed.

11. What important part in the work of the world does petroleum play? If there are any important countries that do not use it in any form, what takes its place?

IV. Problem-study procedure:

A problem formulated from one of the charts or graphs (Text pp. 453–536 or from some other phase of the suggested subject matter) might take several weeks for its solution, counting three periods of geography for each week.

1. The procedure might be—
   a. First inspect the graph, or deliberate over the statement.
   b. From their inspection the children and teacher together ask thought-provoking questions.

c. Class discussion of the problems as formulated and the most thoughtful ones chosen for study.

d. The teacher sometimes organizes the topics for study that the problem suggests, sometimes the class-members outline the topics they think the problem demands.

e. Then the topics outlined should be studied one at a time, using the index and the text. If a new topic is suggested as the study proceeds, that should be included in the outline. It should be put in its right place. Teachers may find as the lesson proceeds that the original order of topics as outlined should be changed. And by the time the problem study is finished, it may be that the entire original outline of topics will be completely re-arranged.

2. Such problems will demand:

a. Graphs drawn by the pupils.

b. Maps of producing areas.

c. Maps of distributing areas.

d. Maps of transportation.

e. A knowledge of map-reading and interpretation.

f. A knowledge of merchant marines of the different countries.

g. A knowledge of climatic conditions and physiography.

h. A knowledge of tastes and advancement of people who produce and consume.

i. A knowledge of the scientific means for intensive production of the various commodities.

NOTE: Where the class shows ignorance of latitude and longitude, winds, rotation of earth, etc., then the problem work should be stopped and those topics taught and drilled upon.

3. In solving a problem the following general outline is suggested:

a. Climate and topography.

b. Raw material obtained from the farms, the plantation, animals, the waters, the forests, or the mines.

c. Manufacturing facilities.

d. Transportation facilities.

e. Social conditions including skilled labor and help.

f. Financial conditions including tariff policies of different nations.

g. Markets both home and abroad.

4. "The cost of manufactured articles depends largely on:

a. "The cost of the raw material at place of manufacture.

b. "The cost of labor.

c. "The cost of power to drive the machinery.

d. "The cost of getting the finished product to market.

e. "The cost of interest on capital invested." (From Gannett, Garrison, Houston; p. 47.)

5. Manufacturing sites are located usually:

a. Where raw material can be obtained cheaply.

b. Where a plentiful supply of skilled labor exists.

c. Where coal is plentiful, so as to insure cheap power, or where water power or electric power can be obtained.

d. Where the markets in which the goods are to be sold are close at hand, or are accessible at low cost of transportation.

TEXT: Tarr and McMurry, *Complete Geography.*

REFERENCE BOOKS: Adams, *Commercial Geography*; Gannett, Garrison and Houston, *Commercial Geography;* Smith, *Industrial and Commercial Geography*, Holt & Co.; Smith, *Commerce and Industry*, Holt & Co.; Day, *History of Commerce*, Longmans; McMurry, *Special Method in Geography*, Macmillan; Dodge and Kirchwey, *The Teaching of Geography*, Rand, McNally Co.; Newbigin, *Geography*, Holt & Co.; Johnson, *Mathematical Geography*, A. B. Co.; Sutherland and Sanford, *Practical Exercises in Geography, Book I*, Silver, Burdett & Co. (Contains a series of problems worked out for classroom use. The topics are related to *Our Own Country and Her Possessions*). Any good set of geographical readers.

MAGAZINES: *The National Geographic, The Journal of Geography, Current Events Magazine, Atlantic Educational Journal.* (Consult the files for plans on geography problems worked out by some of the Baltimore County teachers.)

NEWSPAPERS.

NATURE STUDY: PRIMARY GRADES

Nature study appears upon the program of the primary grades as occurring two or three times a week, averaging about forty minutes weekly, but the work should be directed in such fashion that often more real, live, nature-study work or observation takes place at recess, or before and after school than at any other time. In regard to subject matter, whatever belongs to the natural environment of the children is legitimate material. Suitable choice is made to fit the needs and capacities of the children, the aim being to stimulate keener observation through which to add enjoyment. Our subject matter includes phases of plant and animal life, physical phenomena which affect the lives of those in the community.

Observation, Experiment, Discussion. The outlines are necessarily rich in suggestive material from which teachers are asked to *select with care.* The work of the first and second grades is simple, consisting of apparently informal and incidental observations in relation to directed activities, governed by the seasonal changes. The children should be encouraged to bring in caterpillars, cocoons, flowers, plants, seeds, leaves; to make simple reports of what the robin, the squirrel, the hen, the rabbit do, and what they can do for them; to plant seeds, and watch the growth of a plant from seeds to flower. It should be the purpose to make the nature-study observation work a continuous year-round story, rather than to present small detached, unrelated bits, which can have but little meaning.

The work of the third and fourth grades does not materially differ from the work of the previous grades. The attitude of reverence and respect should be extended through increasing knowledge gained in response to a need in the solution of some real live problems, which the children consider valid and of consequence. To this end it seems best to organize the work in fourth grade around some specific centers of interest suggested by the environment. These large problems while not excluding observation along other lines, demand concentration of effort on the part of both teacher and children in the attainment of a definite result.

Laboratory Work. Garden work at home and the laboratory garden at school offer the best opportunity for *real* nature study. In the absence of this, some other means of stimulating effort will be necessary. Sincere work may be accomplished by means of specimens brought into the schoolroom, by excursions to accessible regions, and setting simple problems which call for accurate observation and clear, concise report.

Records of some kind are essential, records of growth and change by means of collections, of drawings, of pictures illustrating the points observed. The recorded observations of another whether in prose or poetry should be added whenever possible as a means of increasing enjoyment and giving visible means for expression of emotions.

REFERENCES: Hodge, *Nature Study and Life*, Bailey, *The Nature Study Idea*; Scott, *Nature and the Child*; Comstock, *Handbook of Nature Study*; Matthews, *How to Know Familiar Trees by Their Leaves*; Blanchan, *Bird Neighbors*.

FIRST GRADE

Nature study for little children consists of simple observations, talks, and games, about things in relation to the life about them. It is for the purpose of creating an interest in living things and developing a respect and love for the most common things of every day life. The story and the poem should be used freely to strengthen this attitude.

The outline is necessarily formal, but the work is meant to be most informal and natural. To the child, always apparently incidental and accidental; to the teacher, always a part of a well-ordered plan which has for its point of attack something most interesting to the children. Usually pets form a bond of sympathy between home and school, and for this reason should be presented spontaneously at an early stage. Objects which the children bring, or are encouraged to bring, aid the work, but whatever is used should be considered in relation to a definite plan for each season, a plan which has some unity, some continuity from season to season. Piecemeal work is to be avoided. Make use of growing plants, of the pet as a school visitor, of the fish in the aquarium to stimulate sympathetic and real, not pretended observation. A few minutes each day devoted to a few simple things will develop the habit of observation. Several problems, simple enough for little children to appreciate, can be utilized from season to season, or from month to month; as (1) walks and talks in spring and fall for purposes of observation (2) the bulb observed in the autumn, put away to sleep and then brought out in time to bloom for an Easter gift to mother; or (3) the nasturtium seed planted for the competitive plant raising, or the flower in the window box.

Collections of things made by the little children independently and on directed excursions should be used in various sense games through which they learn to recognize and to associate the names of plants, of leaves, of seeds, of fruits, of vegetables, of stones; to learn something of their qualities and something of their beauty and their

use. The teacher of the first grade should have an abundance of interesting objects; some birds' nests, cocoons, queer looking seeds, buds and flowers for use, as occasion demands.

Various projects are suggested as invaluable aids to stimulate observation and experiment and thereby furnish a basis for rational discussion within the child's comprehension. Children learn by doing. The important thing is to keep alive the questioning spirit. Train children to observe; talk, question; then look again.

Time Allotment: Two 15 minute periods per week.

AUTUMN: SEPTEMBER, OCTOBER, NOVEMBER

I. Animal Life:

1. Birds: English Sparrow.

a. What do birds do? Eat, sing, build nests, fly, play, work, care for young, travel.

b. Stories of birds which help to develop ideas of—right feeling toward birds; care of young; observation of bird ways.

REFERENCES: McMurry, *Nature Study Lessons*, p. 120; Wilson, *Nature Study for Elementary Schools*, p. 99; Poulsson, *Child's World*.

2. Insects. Caterpillars and cocoons.

a. Collect cocoons and keep for spring observations.

b. Observe the fuzzy caterpillars on the walks and elsewhere.

REFERENCES: McMurry, *Nature-Study Lessons*, p. 122.

3. Pets. Dog, Squirrel.

a. Children's experiences with pets; pets kept at home; at school.

b. Their friends; enemies; their life, how they sleep; good or harm they do.

c. Stories of pets in which they tell of their own doings.

REFERENCES: Craik, *Bow-wow and Mew-mew;* Hodge, *Nature Study and Life*, Chap 3; Poulsson, *Child's World;* McMurry, *Nature Study Lessons*, pp. 3–13, 43–56.

II. Plant Life:

1. Color.

Fields, trees, sky, birds, flowers, charts of leaves and fruit.

REFERENCES: Prang, *Art Text Books*, I, pp. 1–6.

2. Flowers.

a. Schoolroom flower: Geranium, in pot or window box. Care.

b. Naming. Fall Flowers. Sense games.

REFERENCES: McMurry, *Nature Study Lessons*, p. 141.

3. Fruits and vegetables.

a. Naming of trees, bushes, vines; apple, pumpkin, nuts.

b. Vegetables good to eat.

c. Sense games.

REFERENCES: McMurry, *Nature Study Lessons*, pp. 176–177.

4. Seeds.

a. Dissemination. How seeds travel; winged seeds, maple, catalpa; seeds with sails, milkweed, thistle; seeds that roll, pea; seeds that catch rides, beggar's lice.

b. The milk-weed pod; shape, attachment to stem; many seeds; use of silken hairs.

REFERENCES: Wilson, *Nature Study for Elementary Schools*, pp. 77–79.

5. Trees.

a. One tree chosen as a class tree and observed throughout the year: Note changing color, and falling of leaves.

b. Recognize the following: Fruit trees, apple. Forest trees, maple or chestnut.

c. Winter buds.

d. Leaves: study shape of leaf by tracing around the leaf and cutting from paper.

REFERENCES: McMurry, *Nature Study Lessons*, p. 167; Wilson, *Nature Study for Elementary Schools*, Chap. 2.

III. Weather Conditions:

1. Sun. Observe that the sun gives light and heat. Observe that the days are growing shorter and colder.

2. Stories about sun and moon.

3. Daily weather record.

REFERENCES: Cooke, *Nature Myths;* Poulsson, *Child's World;* Wilson, *Nature Study for Elementary Schools*, pp. 13–16.

Projects:

(Doing things to some end is the best way to create an interest that is not superficial.)

1. Keep a weather record in some simple fashion upon the blackboard or upon manilla charts. Show in pictorial fashion the observations of the wind and kind of day.

2. Collect cocoons and save for spring observations of awakening life.

3. Keep caterpillars in a perforated box. Feed them the proper food and watch them make the cocoon.

4. A pet as a visitor; as the dog. Train children to respect the well-trained visitor and use for natural, spontaneous discussion of a simple nature.

5. Make a drawing of the landscape in the autumn and indicate changes as they appear, e. g., change in foliage, in grass, noted by the children.

6. Collection of leaves, fall flowers. Mount upon small cards so children may handle them in sense games. Use as border around the blackboard ledge.

7. Children may make a book containing three well-known leaves, from three trees in the neighborhood. Save until winter and help them to know the tree in its winter dress through recall of these leaves and their respective trees.

8. Collection of fruits, vegetables and seeds. Name and use in sense games of touch, taste, sight, smell, sound.

9. Excursion to the yard to gather fall flowers and seeds, a walk in the woods in autumn; to gather cocoons; to observe caterpillars.

10. Use stories and poems to add spiritual significance to the common elements of every day life.

11. Collection of one vegetable or fruit from each child to contribute to the community basket for some poor or needy family.

12. Children should be warned against trespassing.

WINTER: DECEMBER, JANUARY, FEBRUARY

I. Animal Life:

1. Birds: Chickadee, pigeon. See previous outline.

REFERENCES: McMurry, *Nature Study Lessons*, p. 86; Wilson, *Nature Study for Elementary Schools*, p. 164.

2. Pets. Cat.
   a. Stories of home pets.
   b. The visits of these pets to school.
   c. The care of a pet; at home, at school.

REFERENCES: Hodge, *Nature Study and Life*, p. 41; McMurry, *Nature Study Lessons*, p. 13; Poulsson, *Child's World*.

3. Pond Life. Fish in aquarium.

REFERENCE: Wilson, *Nature Study for Elementary Schools*, pp. 116, 128.

II. Plant Life:

1. Flowers. Schoolroom flowers: Geranium, hyacinth from bulbs.
   a. Transplant geranium from garden as cold weather approaches.
   b. Observe bulb, put away for winter's sleep, bring out in February for planting. Use bulb-glass.
2. Seeds:
   a. Germination of seeds: Peas, beans, corn or flax. Study progress of growth through one month, February. Use moist blotting paper, sponge, cotton, sand, soil.
   b. Grow plants in vessels of water—onion, carrot, sweet potato, Wandering Jew. Attempt no explanation, but let the children observe.
   c. Talks in story-form.
      Baby Bean in Bed. How it awoke. How it grew.
      Baby Lily in its Winter Flannels.
      The Escape of the Baby Plant from its Cradle.

REFERENCES: Bass, *Plant Life;* Poulsson, *Child's World;* Wilson, *Nature Study for Elementary Schools*, pp. 133, 143.

3. Trees:
   a. Christmas trees. What are they? Where do they come from? Appearance, uses.
   b. Excursion to chosen tree.

REFERENCE: Wilson, *Nature Study for Elementary Schools*, pp. 109–111.

III. Weather Conditions:

1. Daily weather record: Observations, simple discussions, and records.
2. Frost, snow, sleet, dew, rain. Observations upon occasion.
3. Stories about clouds, wind, rains. Notice frost upon the window pane; note shortening days and cooler weather. Notice ice in streets and ponds; also icicles.

REFERENCE: Wilson, *Nature Study for Elementary Schools*, pp. 68–70, 108.

Projects:

1. Continue the weather record if needed to establish the habit of observation of weather conditions.
2. Experiment with bottle of water, allow it to freeze, then bring it to the room and have the children note that melting brings water again.
3. Care of window-box and other schoolroom plants by committees of children. Establish habits which lead to care of person, to desire for order and beauty in the room, and to right care of plant which can be later applied to the individual plant.
4. Collections of pictures, of birds, of animals. Make use of children's story and picture books which children are urged to bring from home.
5. Watch germination of seeds, and other growing plants. Talk little, but observe growth. Train children to see, then talk
6. Make a class picture-book of animals which the children know by sight.
7. Play games with animal cards: name and tell one thing that the animal is used for, and other games.

8. Poems and stories which add to children's knowledge and increase their love for animals and plants observed.

SPRING: MARCH, APRIL, MAY, JUNE

I. Animal Life:

1. Birds: Robin, hen. Select one for study See previous outline.

REFERENCES: McMurry, *Nature Study Lessons*, pp. 69, 86, 91; Poulsson, *Child's World;* Wiggin and Smith, *Story Hour;* Wilson, *Nature Study for Elementary Schools*, p. 87.

2. Insects:

Butterflies. Observe in garden and field.

REFERENCES: McMurry, *Nature Study Lessons*, p. 87; Wilson, *Nature Study for Elementary Schools*, p. 50.

3. Pets. Rabbit.

REFERENCE: McMurry, *Nature Study Lessons*, pp. 61–68.

4. Animals. At the circus. Stories of animals from far-away lands.

5. Pond Life. Tadpoles; minnows in aquariums.

REFERENCES: Bass, *Animal Life;* Wilson, *Nature Study for Elementary Schools*, pp. 118, 122, 124.

II. Plant Life:

1. Competitive plant raising. Flower. Nasturtium. Seeds may be obtained from the Agricultural Department at Washington. Individual flower pots or tin cans with holes in the bottom may be used.

2. Garden Work.

a. Window garden. Flowers: Nasturtium or geranium.

b. Home and school outdoor garden: Vegetables: Beans, corn. radishes, onions, lettuce. Flowers: Nasturtium, morning glory, pansies. Encourage in every possible way.

REFERENCE: Hodge, *Nature Study and Life*, Chap. VI.

3. Flowers:

a. Flowers from trees: Pussy willows, maple, apple. Observe unopened buds, and watch changes.

b. Wild flowers. Recognize and name violets, spring beauty, dandelion, buttercup.

c. Garden flowers: Tulip, jonquil, crocus, narcissus, lilac.

REFERENCES: Bass, *Plant Life;* McMurry, *Nature Study Lessons*, pp. 16, 152; Wilson, *Nature Study for Elementary Schools*, pp. 229, 230, 238, 241, 245.

4. Trees:

a. Spring buds and blossoms; pussy willow; horse chestnut buds.

b. Observe the chosen tree.

REFERENCES: McMurry, *Nature Study Lessons*, p. 164; Wilson, *Nature Study for Elementary Schools*, pp. 169–174.

III. Weather Conditions:

1. Spring signs. Observe that days are growing longer and warmer. Note return of birds. April showers.

2. Daily weather record.

3. Stories about the wind, rain, clouds, sun.

REFERENCES: Bass, *Plant Life;* Wilson, *Nature Study for Elementary Schools*, pp. 153. 158.

Projects:

1. If the hen is selected for observation, try to have the children choose one from home flock, if hens are kept at home.

2. Excursion for flowers on May Day. Later, to get clovers and daisies, and to note butterflies; to the chosen tree.

3. Tadpoles for observation in jar on window-sill.

4. Easter booklets with rabbit and chicks as the basis for the form of the book.

5. Competitive plant-raising. Keep pots at school, until the habit of care is established. In some cases this means a certain number from the class kept at school, the rest at home.

6. Raise radishes in the home garden and have a radish party in June.

7. Weather record showing the return of birds, the first flowers, and other spring signs; use illustrations.

8. Tame birds by feeding them crumbs upon the window sill.

9. Build a bird fountain in the school yard.

SECOND GRADE

Nature study in the second grade does not differ materially from the first, since the interests of the children are very much the same. Many of the problems begun in the first year should be extended from year to year until an intimate acquaintance is felt through repeated associations.

The very best work results from the direct observation of the nature study material in schoolroom and out, the teacher stimulating attention and increasing activity of thought through her suggestive questions and happy manner. The nature study lesson is, indeed, the "children's hour," often accidental and incidental, as far as they are concerned, but always well-planned and forming a part of a larger unity when considered from the teacher's standpoint. It is needless to add that specimens in the schoolroom are a necessity, and that the excursion, however short, and outdoor work including the raising of a best plant, are vital to *real* nature study. Stories and poems are used to enhance the ethical significance and to give the children a medium through which to express their emotions.

The outline following is not a minimum course of study but suggests a wide range of topics from which material for a series of lessons can well be planned. The children and environment will determine largely the mode of attack. The seasons with their changing and ever recurring activities form a thread of unity which if properly organized will prevent disjointed, scrappy work. In this grade as in succeeding grades the children should come to have a real and abiding acquaintance with some one bit of nature in the immediate environment. Develop a kind of intimacy and personal interest in "Our Tree," "Our Plants," "Our Garden," "Our Birds," and others.

Since seeing and doing go hand in hand various kinds of activities are suggested under the head of projects, some of which are directed observations in the schoolroom, as watching and caring for a plant; in the field, as excursion or outdoor work; some constructive work, as making booklets for records; some games; some contributions for pleasure of others and enjoyment of the class.

Time allotment: Two 15 minute periods per week.

AUTUMN: SEPTEMBER, OCTOBER, NOVEMBER

I. Animal Life:

1. Birds.

a. The bird's home; how he is fed; his first suit; how he changes his clothes; his first flight; his education The bird's language; how he eats; where he sleeps; his habits; his family and friends.

b. Stories of birds.

REFERENCES: Miller, *First Book of Birds;* McMurry, *Nature Study Lessons*, p. 120;

Wilson, *Nature Study for Elementary Schools*, pp. 100–101; Wiggin and Smith, *Story Hour.*

2. Insects. Cricket.

Life, history and habits *observed* from watching development in jar and with fresh apple for food.

REFERENCES: Hodge, *Nature Study and Life*, Chaps. XIV, XV; Wilson, *Nature Study for Elementary Schools*, pp. 50–53, 58, 59, 236.

3. Pets. Cat.

a. Problems:

(1) How does the cat take care of itself?

(2) Ensure safety from enemies?

(3) Care of young.

(4) Cats as pets.

b. Stories of cats.

c. Rats and mice:

REFERENCES: McMurry, *Nature Study Lessons*, pp. 3–19; Poulsson, *Child's World;* Wiltse, *Kindergarten Stories and Morning Talks.*

4. Domesticated animals: Sheep. Name animal coverings, and tell use.

5. Hibernation of animals: Bear. Name animals that hibernate.

REFERENCES: Hodge, *Nature Study and Life*, Chap. XVI; McMurry, *Nature Study Lessons*, pp. 37–43; Wilson, *Nature Study for Elementary Schools*, pp. 100–101.

II. Plant Life:

Characteristics of the season:

1. Collect and prepare seeds for the spring work. Take in house plants; rake and burn leaves in yard; note disappearance of insects. Appearance of landscape.

REFERENCE: Hodge, *Nature Study and Life*, Chap. VI.

2. Garden work.

a. Window gardens: Preparation of plant for winter. Collect seeds for next spring's planting. Study bulbs: hyacinth, crocus or Chinese lily. Put away for winter's rest, and bring out in February in time to bloom for an Easter gift to mother.

b. Fruits and vegetables. Recognize and name. Observe the apple, potato, corn.

c. Report of garden work done during summer.

REFERENCES: Cooke, *Nature Myths;* Poulsson, *Child's World;* Wilson, *Nature Study for Elementary Schools,* pp. 96–98.

3. Flowers.

a. School-room flowers: Geranium or petunia in pot or window box.

b. Autumn flowers: Garden and field. Recognize and name.

REFERENCES: Hodge, *Nature Study and Life,* Chap. VII; McMurry, *Nature Study Lessons,* pp. 141, 142; Wilson, *Nature Study for Elementary Schools,* pp. 18–37.

4. Seeds.

a. Dissemination: Cocklebur, beggar's lice, Spanish needle, burdock, dandelion.

(1) Carried by animals.

(2) By the wind.

(3) By water.

b. Fruits and seeds. Recognize and name; apple, peach, plum, orange, tomato, grape, acorns, nuts.

c. Collections.

REFERENCES: Poulsson, *Child's World;* Wilson, *Nature Readers,* I, II; Wilson, *Nature Study for Elementary Schools,* pp. 71-79.

5. Trees.

a. One tree chosen as the class tree for study throughout the year: Oak, maple, birch, or chestnut.

(1) Recognition by sight, sound, touch, taste, smell.

(2) Excursion.

b. Naming: Fruit trees, forest trees.

c. Winter buds. Observe changes

REFERENCES: McMurry, *Nature Study Lessons,* pp. 164, 167, 175; Poulsson, *Child's World.*

III. Weather Conditions:

1. Wind. Teach points of compass.
2. Sun.
   a. Note position in sky at 12 m., at 9 a. m.
   b. The sun as a source of heat.
3. Daily weather record.
4. Stories about the sun and moon.

Projects:

1. Collections of leaves, seeds, flowers. Mount in suitable ways, and use in sense games.

2. Transplant geraniums from garden to window boxes. Train children in careful habits through appointment of committee to water regularly, to strip off old leaves, to wash the leaves of dust, to keep in the sunlight, to loosen the soil.

3. Cleaning of yard in autumn; raking leaves, care of flower beds and walks.

4. Crickets in jars, one in each; feed with apple for food.

5. Pictures of birds on charts to aid children in recognition of the most common ones in the community.

6. Pictures of members of the cat family from all parts of the world.

7. Weather record kept by means of pictorial symbols and words.

8. At regular intervals, on a certain day in the month, have the children make a picture of the landscape, showing characteristic changes of the season.

9. Contribution of a fruit or vegetable to a community basket for a needy family at Thanksgiving.

WINTER: DECEMBER, JANUARY, FEBRUARY

I. Animal Life:

1. Birds: Chickadee, wren. Study one only. The absence of certain birds. What birds return?

REFERENCES: Hodge, *Nature Study and Life*, pp. 334–495; McMurry, *Nature Study Lessons*, p. 113; Wilson, *Nature Study for Elementary Schools*, pp. 146, 147, 164.

2. Pets. Dog.

a. Set simple problems which will give ideas of use. care and structure.

b. Children note:

Differences in size of dogs.

Food: What he eats; how he takes it; how he drinks.

Sharpness and use of teeth.

Keen sense of smell and hearing.

Endurance in swimming and running.

Intelligence: form of expression (joyful barks and growls); recognition of friend and foe.

Use to man: faithfulness; what he should expect in return.

c. Stories of dogs told and read.

REFERENCE: Hodge, *Nature Study and Life*, p. 28.

3. Pond life. Gold fish in aquarium. Let children care for them. Note general shape; fins; tail, and their uses. Observe beauty and grace when swimming.

REFERENCES: Hodge, *Nature Study and Life*, p. 393; Poulsson, *Child's World;* Wilson, *Nature Study for Elementary Schools*, pp. 117–123.

II. Plant Life:

1. Flowers.

a. School-room flower: Geranium or petunia.

b. Bulbs: Hyacinth, or Chinese lily.

REFERENCE: Wilson, *Nature Study for Elementary Schools*, pp. 96–98.

2. Seeds.

a. Germination of beans, peas, corn. Study progress of these seedlings through one month's growth. Use moist blotting paper, sawdust, cotton, sand, soil. Attempt no explanation, but let children observe.

b. Grow plants in vessels of water: Onion, carrot, sweet potato.

REFERENCES: Bass, *Plant Life;* Wilson, *Nature Study for Elementary Schools*, pp. 133, 143.

3. Fruits and Vegetables.

Tropical fruits. Naming.

4. Trees.

a. Evergreens. Holly.

b. Study chosen tree in winter. Observe condition of winter buds.

REFERENCES: McMurry, *Nature Study Lessons*, p. 181; Wilson, *Nature Study for Elementary Schools*, pp. 114, 115.

III. Weather Conditions:

1. Ice, frost, snow, rain. Notice ice in street gutter and in ponds, and icicles.

Notice frost in fields, on window panes.

Notice snow crystals on cloth, observe size and shape.

2. Continue observations of sun, wind, weather.

3. Daily weather record.

4. Stories about moon and stars.

REFERENCES: Cooke, *Nature Myths;* Poulsson, *Child's World;* Wilson, *Nature Study for Elementary Schools*, pp. 102–105.

Projects:

1. Study of bulb. Put away to rest and bring out in February.
   Watch development into Easter blooming.
   Chinese lily can be kept in dish filled with water and stones.
2. Germination of seeds and development of growing vines during the winter months.
3. Gold fish in aquarium. Train children to change water, and to feed fish, and to observe the fish from time to time.
4. Pictures of dogs. Photographs of pets of children, of different kinds of dogs. Mount on cards for use in games, or in a class book.

SPRING: MARCH, APRIL, MAY, JUNE

I. Animal Life:

1. Birds. Bluebird, robin, duck, wren.
   a. See previous outline.
   b. Note returning of birds, record on bird charts.

REFERENCES: McMurry, *Nature Study Lessons*, pp. 86, 91; Wilson, *Nature Study for Elementary Schools*, p. 184.

2. Insects. Butterflies. Observe in fields and gardens. Give the life history briefly with caterpillar, cocoon, and eggs.

REFERENCES: Hodge, *Nature Study and Life*, pp. 222, 228; Wilson, *Nature Study for Elementary Schools*, pp. 48, 184, 236.

3. Pond Life. Fish, frogs, earthworms.

REFERENCES: Hodge, *Nature Study and Life*, p. 393; Poulsson, *Child's World;* Wilson, *Nature Study for Elementary Schools*, pp. 117, 122.

4. Domesticated animals. Cow. See previous outline.
5. Animals at the circus. Recognize and name stories of animals which illustrate their characteristics, as stories of monkeys, of bears.

REFERENCES: Bryant, *How To Tell Stories;* Eggleston, *Stories of Great Americans for Little Americans;* Kipling, *Jungle Book, Just-So Stories;* McMurry, *Nature Study Lessons*, p. 30; Poulsson, *Child's World.*

II. Plant Life:

1. Competitive plant-raising. Nasturtium.
   Each child should participate in this competition.

REFERENCE: Hodge, *Nature Study and Life*, Chap. VI, VIII.

2. Garden work:
   a. Window gardens: Flowers or vegetables; nasturtiums, or beans, peas, or corn; study growth.
   b. Home and school outdoor gardens: Lettuce, radishes, onions, peas.
   c. Soils: Kinds, preparation, for flower pots.
3. Flowers:
   a. Wild: Buttercup, daisy, violet, tulip, clover, dandelion; those in shady places; in sunny places.
   b. Common street plants: Shepherd's purse, pepper grass, chickweed.
   c. Special study of some favorite: Buttercup; its home; flower, leaves, stem, root; color and significance of name.

REFERENCES: McMurry, *Nature Study Lessons*, pp. 152, 160; Hodge, *Nature Study and Life;* Wilson, *Nature Study for Elementary Schools*, pp. 244–246, 248, 250.

4. Fruits and vegetables:
   a. Naming: Fruits of trees, shrubs, vines.
   b. One vegetable raised by children in the garden. as radishes or onions.

5. Trees:
   a. Study chosen tree: review work done in autumn.
   b. Buds, flowers, seeds, leaves, of at least one other tree, maple, willow, or elm.
   c. Twigs; put in water and watch unfolding. Learn the difference between leaf and flower buds. Watch lilac, elm, horse chestnut or cherry.

REFERENCES: McMurry, *Nature Study Lessons*, pp. 164, 171; Wilson. *Nature Study for Elementary Schools*, pp. 201, 209. 218, 221.

III. Weather Conditions:

1. Weather record.
2. Wind. Note direction and record. Note its blowing. Uses of wind.
3. Use of rain. Note falling in drops; appearance of clouds at the time; effect on animals and plants.
4. Stories about wind, sun, rain, dew.

REFERENCES: Arnold and Gilbert, *Stepping Stones*, II, pp.85, 96, 106; Wilson. *Nature Study for Elementary Schools*, pp. 10–15.

Projects:

1. Excursions: To familiar, chosen tree; for wild flowers on May day; to observe garden work.
2. Bird chart showing arrival of birds in spring, and their activities, in nest building and food getting.
3. Flower chart noting arrival of first flowers, where found and by whom.
4. Develop a desire to help and protect our native birds by putting out food, little drinking troughs, and bits of twine, thread, hair, and feathers.
5. Weather record with pictures of landscape made at certain regular intervals during the spring months.
6. Twigs in water: Watch leaf and flower bud unfolding.
7. Home garden work: Raising one vegetable as radishes or onions. Have a "Bread and Butter and Radish Party" in June.
8. Raising a best plant: A school competitive exhibit in June with an open-air performance.
9. Stories and poems learned in relation to plant and animal life, reflecting the joyous opening of spring.
10. Tame birds by feeding them crumbs upon the window sill.
11. Build a bird fountain in the school yard.

THIRD GRADE

A strong, general interest in nature, plants, animals, pets, and nature happenings is still manifest in the children of the third grade, and since their nature interests are many and varied the general character of the work does not differ from that of the previous year. The outline, presenting a wide range of subjects, aims to meet these varying interests of children and at the same time provide opportunity for choice on the part of the teacher according to the needs of her children and their environment. A teacher's lack of data is not sufficient excuse for lack of vital nature work which the locality affords, since outdoor observations and books are available to meet her need for preparation. Unity and coherence in the work need emphasis and the various projects should be considered as parts of an all-the-year-round cycle.

The same methods prevail as in the previous grades but with increasing intensity of purpose. The questioning attitude still persists and delight is still shown in simple identification. But the children are older; an increasing self-control and a degree of skill has been attained which enables them to concentrate their efforts to definite ends, if kept within their grasp. The exploring, collecting and constructive instincts are rising into prominence. Interest in excursions and collections is keen. Gathering and preserving specimens, observing live specimens brought into the schoolroom are important. The constructive interest is centering upon the thing done or the product. The child's ambition is often quite beyond his skill, but his efforts are worthy of respect and encouragement. Gardening, the care of pets, and various simple experiments which help to solve some simple problems engage his attention.

Garden work for third grade children assumes some dignity because they are now old enough to engage in it with some advantage to themselves and others. Home garden work, of a very simple nature, usually raising one or two vegetables, should be encouraged, for this contact with the soil, and observation of growth instils respect for all plant life.

The raising of a best plant in a pot for a competitive flower exhibit is a bit of garden work in miniature, and affords opportunity for excellent, motivated work.

"Go, See, Say and Do" is the motto of this grade. Excursions for the purpose of directing keen observations; truthful statement; insisting that children tell what *they* see, not what someone else sees for them; and all leading to action which in the main helps to foster and maintain life; these are the important factors in nature study.

This method of procedure should develop a real and abiding intimacy with some phases of nature in the immediate environment by giving meaning and purpose to what has been heretofore largely isolated bits of observation. The children should come to have a personal interest in "Our Class Tree," "Our Plants," "Our Garden," "Our Ants," and this may form the nucleus for extending the horizon to increasingly larger units and larger problems in succeeding grades.

Expression in some tangible form is necessary to fix habits and to retain knowledge. Suggestions are given under the head of projects for various kinds of activities during the year. A sufficient variety affords opportunity for selection to suit the needs of the children. Some written work is essential as an aid to correct and truthful statement.

As in previous grades literature should be used to enhance the significance of common things, furnishing the children with a medium of expression which adds to their permanent enjoyment.

Time allotment: Two 20 minute periods per week.

AUTUMN: SEPTEMBER, OCTOBER, NOVEMBER

I. Animal Life:

1. Birds. Swallow or oriole.

The life of a bird.

a. The bird's home, how he is fed, his first suit, how he changes his clothes, his first flight, his education. The bird's language, how he eats, where he sleeps, his travels, his family and friends.

b. Bird chart. Lists of common birds in the community. Food they eat; trees they live in; nests they build; songs they sing; things they do.

c. Stories of birds.

REFERENCES: Blanchan, *Our Bird Neighbors;* Hodge, *Nature Study and Life*, Chap. VIII; Miller, *First Book of Birds, Second Book of Birds;* McMurry, *Nature Study Lessons*, p. 120; Wilson, *Nature Study for Elementary Schools*, pp. 166–167.

2. Insects. Grasshopper, or cabbage butterfly.

Life history and habits studied by observation of insects in boxes, breeding cages, and out in the yards and fields.

REFERENCES: Hodge, *Nature Study and Life*, pp. 200, 201, 480, 225, 262, 266; Wilson, *Nature Study for Elementary Schools*, pp. 51, 39, 40, 45, 60, 61.

3. Domesticated Animals.

a. Feeding of pet animals.

b. The treatment of horses and dogs.

c. Animal stories.

REFERENCES: Baldwin, *Fifty Famous Stories;* Hodge, *Nature Study and Life*, pp. 37-41; McMurry, *Nature Study Lessons*, pp. 3–30; Poulsson, *Child's World.*

II. Plant Life:

1. Observation of landscape, color changes and causes for change in grass, cultivated fields, foliage, flowering plants and shrubs. See geography. Observe work in gardens, in parks, in open fields.

2. Garden Work:

a. Vegetables. List those with parts above ground used for food; those with parts below ground, used for food. Study peas or tomatoes, from seed time to harvest. Bring in products from home gardens.

b. Plant propagation. Seeds and their dissemination: burdocks, beggar ticks, dandelions, balsams.

c. Window garden. Geraniums in boxes, or pots, bulbs in pots or bulb glasses. Chinese lily bulbs suggested.

3. Flowers: Wild and cultivated. List plants blooming in autumn; compare with spring flowers in color, structure, hardy qualities. Study in detail one of these: Jamestown weed, sunflower, golden rod and aster, thistle or nasturtium. Collect seeds.

REFERENCES: Hodge, *Nature Study and Life*, pp. 102–105, 115; Wilson, *Nature Study for Elementary Schools*, pp. 29–36.

4. Trees, shrubs and vines

a. Choose a tree for observation; in school yard; or on lawn at home, or in nearby field. Chestnut or oak suggested. Note its manner of branching; bark, rough or smooth; leaves, fruit, the home of the seed; its color, shape, use, gathering.

b. Familiarize children with trees of orchard and field common to the locality, by shape, leaves, bark, blossoms, seeds. Collection of leaves, or bark, of wood, of seeds, of fruits, for this purpose. Learn to recognize the tulip tree, sycamore, catalpa, linden, poplar. Uses: for shade, or screen or windbreak, or for beauty.

c. Familiarize children with flowering shrubs: Lilac, syringa, forsythia, bridal wreath, by their beauty of form, the blossoms, the foliage, and their decorative uses on lawns, as hedges, etc. Difference between trees and shrubs.

d. Familiarize children with vines. English ivy, woodbine, grape, honeysuckle, morning glory, Virginia creeper. Vine habits compared with trees and shrubs, twining stems, tendrils, roots; needed support; uses as screens and wall coverings; beauty of flower or autumnal colorings; value of fruit.

e. The orchard. Native fruit trees, the apple, pear, peach; nut bearing trees, hickory, black walnut, butternut, chestnut. Compare a fruit tree with a tree of the forest.

f. Insect pests of the garden and orchard; bird friends.

REFERENCES: Art Text Book, III, pp. 10–16; Hodge, *Nature Study and Life*, Chap. XXII, XXIII; Wilson, *Nature Study for Elementary Schools*, pp. 211–220.

Projects:

1. Collect seeds and classify according to modes of travel; edible seed cases as: dry fruits, fleshy fruits.
2. Collect leaves, press and mount and name tree, shrub or vine from which each came.
3. Regularly appoint committees to care for window gardens.
4. Collect fall flowers of garden and fields, press, mount, and name each.
5. Make portfolio for pressed leaves, flowers, or seeds.
6. Drawings made of nature materials, used as record in the class "Nature Book."
7. Flower calendars.
8. Collection of fruits or vegetables for the community basket to be given to some needy family in the community.
9. Excursion to chosen tree; for seeds, and to study the lawn in autumn.
10. Stories and poems learned which enhance the significance of familiar things in nature.

WINTER: DECEMBER, JANUARY, FEBRUARY

I. Animal Life:

1. Birds. Blue bird or junco.
   a. Compare with robin.
   b. Covering. Note distinguishing marks.
   c. Habits: Observe. Food: What, where found. Nest: Where, how made.
   d. Use to man.

REFERENCES McMurry, *Nature Study Lessons;* Wilson, *Nature Study for Elementary Schools*, pp. 164, 165, 187.

2. Insects: Ants.

a. Ants: Life history; habits, studied from a nest kept in the school room. Continue observation during spring months in the yard and fields.

b. Interesting stories are abundant. The ant at home. How ants manage a farm. How ants carry on war. The ant as a carpenter.

REFERENCES: Hodge, *Nature Study and Life*, pp. 86–88; Wright, *Seaside and Wayside*,

3. Domesticated animals: Sheep, cow or camel.
   a. How domesticated.
   b. Problems: (1) Obtain food; (2) Secure safety; (3) Means of defense; (4) (4) Care of young: (5) Use to man; effect of domestication.

REFERENCES: McMurry, *Nature Study Lessons*, p. 30.

II. Plant Life:

1. Observation of winter landscape. See Geography. Note frost on windows, walls of buildings, sidewalks, grounds, stones, plants. Effect on plants.
2. Garden Work.
   a. Window garden. Observation of bulbs: Hyacinth, crocus, tulip, or Chinese lily. Care of plants in winter. Effect of gas, of exposure to cold.
   b. Plant propagation. Germination of one kind of seed, as peas, beans or corn. Observe and record progress of growth. Use box with glass side, if possible.
3. Trees, shrubs, vines.
   a. Observe the chosen tree under winter conditions.
   b. Note care of shrubs in yard.
   c. Vine habits in winter.

Projects:

1. Care and observation of bulbs in open dish or bulb glass.
2. Sketch the chosen tree in its winter dress; get correct shape and branching.
3. Experiments in germination of seeds: class and individual records kept.
4. Stories and poems memorized by individuals for class enjoyment.
5. Keeping "A Shrine of Beauty" during the winter months; e. g., a flowering house plant, a pretty colored vase, a vine, or a picture; "first things" of spring.
6. Tame birds by feeding them crumbs upon the window sill.
7. Build a bird fountain in the school yard.

SPRING: MARCH, APRIL, MAY, JUNE

I. Animal Life:

1. Birds: Woodpecker, scarlet tanager or meadow lark. See previous outline.

REFERENCES: Miller, *First Book of Birds, Second Book of Birds;* Wilson, *Nature Study for Elementary Schools*, p. 145.

2. Insects: Ants—continued.
   Spiders:
   a. Study live specimens in a glass jar (top covered with cheese cloth). Supply spiders with flies and water.
   b. Make daily observations and have pupils report.
   c. Observe the divisions of body and compare with insects: Observe the manner of feeding, the laying of the eggs, the making of the webs, the means of defense, and other habits.
   d. Observe spiders out of doors.
   e. Give information. Spiders are useful and not harmful; they destroy injurious insects; they will not bite unless in self-defense.

REFERENCES: Hodge, *Nature Study and Life*, pp. 191, 195, 207; Wilson, *Nature Study for Elementary Schools*, p. 45.

3. Pond life. Frogs, earthworms, or moles.

REFERENCES: Wilson, *Nature Study for Elementary Schools*. pp. 122, 181, 184, 186.

II. Plant Life:

1. Observation of landscape. See Geography.
2. Garden work:
   a. Competitive plant-raising. The balsam, or lady's slipper.

Preparation of soil; drainage of pots, planting on the day specified; care of plant at school and at home.

b. Plant propagation:

(1) Seeds. Illustrate in competitive plant-raising.

(2) Cuttings. The geranium, begonia, or Jacob's ladder, or English ivy.

(3) Bulbs Illustrated in bulbs raised.

(4) Transplanting. If possible, have some wild flowers transplanted from the woods to the school yard, or home yard; as ferns, violets, or wild gernaium.

3. Flowers. Wild and cultivated. List plants blooming in early spring; compare with summer flowers. Study one or more flowers in detail: as Jack-in-the-Pulpit, violet, clover, laurel. Note where each grows. Observe parts of plant; root; leaf; flower, flower stem; peculiar characteristics; use.

4. Weeds. List weeds found in gardens; along the roadside; in the yard. Find why weeds are so persistent.

5. Grass. On the lawn; care, determine where growth takes place. Enemies of the lawn: dandelions; how to keep a lawn free from them. Moles: what they do: their structure and habits.

6. Trees, shrubs and vines:

a. Visit the chosen tree in spring. Observe bud changes, leaf and flower indicate by blackboard sketches the result of observations.

b. Visit shrubs and vines on the lawn. Note differences in the habits of each. Repeat the observations made in the fall, helping children to note luxurious growth as indicated in leaf and blossom.

Projects:

1. Each child is a competitor in the raising of a plant.

2. Class and individual demonstration of propagation of cuttings. Let the children start Jacob's ladder, or sweet potato, or carrot in glass of water.

3. Start a school-yard garden of wild flowers.

4. Flower calendar; name of flower; by whom found; date; drawing of flower; or pressed flower, or both.

5. Drawings and specimens of spring flowers made by children for the class "Flower book," or "Flowers Common to our Locality."

6. Books containing drawings and pressed specimens of grasses made by children for the class: "Leaves of Grass."

7. A "Shrine of Beauty" to which each child contributes during the year.

8. Excursions. In school yard, in nearby field, or along roadside; to the woods, to a green house, each well-planned and with a definite purpose in view.

FOURTH GRADE

Nature study is for the purpose of giving enjoyment through intelligent contact with nature. Knowledge gained in pleasant and purposeful ways in previous grades should be used as a foundation for a richer and fuller treatment of similar and not necessarily the same subjects in this grade.

Specific nature problems suggested by the environment are presented around which the work is organized. The problems are: Our Woods, Our Orchard, Our Park, The Garden, The Lawn, Pond Life. It is not intended that all of the work suggested shall be attempted by any one class, since it is arranged to meet the

needs of different localities, and a teacher is free to choose some phase which makes a strong appeal to interest. Not more than two centers should be attempted during the year, and the problems considered in relation to these should be sufficiently compelling in their nature to stimulate both teacher and children to the attainment of definite results.

Excursions definitely planned by both teacher and children and supervised by the teacher, supplemented by smaller organized groups under the guidance of a class leader; specific problems in outdoor work in the home and laboratory, garden; the competitive plant-raising; simple experiments conducted in the schoolroom, are the avenues through which observational work is directed.

Some attempt is made to extend the knowledge of the home region to natural phenomena in regions remote, through imagination, stimulated by collected objects of various kinds and visits to the Horticultural Museum.

Literature, as in previous grades, should be used to enhance the significance of common things, furnishing the children with a medium of expression which adds to their permanent enjoyment. The story or poem may often be given as a contribution from one member of the class for the enjoyment of the whole, as a supplement to first-hand observation and crude attempts at expression.

Knowledge and appreciation should be expressed in some tangible form, as (1) Audubon Societies which help to foster ideals in relation to bird life; (2) respect for property, warning children against trespassing; (3) school activities; through which records of experiments of observations may be made.

Time allotment: Two 20 minute periods, per week.

REFERENCES FOR THE TEACHER: Hodge, *Nature Study and Life;* Comstock, *Insect Life, Handbook of Nature Study;* Wilson, *Nature Study for Elementary Schools;* Scott, *Nature Study and the Child;* Blanchan, *Bird Neighbors;* Dana, *How to Know the Wild Flowers;* Matthews, *How to Know Trees by Their Leaves.* Bulletins from the Department of Agriculture, Washington: *No. 54. Some Common Birds; No. 196. Usefulness of the American Toad; No. 218. The School Garden; No. 157. Propagation of Plants.*

REFERENCES FOR THE CHILDREN: Wilson, *Nature Study Readers, I, II;* Wright, *Seaside and Wayside, I, II;* Patterson, *The Spinner Family;* Miller, *First and Second Book of Birds;* Burgess, *Mother West Wind's Children.*

THE GARDEN

The garden offers the best opportunity for vitalized nature study if the work can be arranged around definite working problems. To this end it is suggested that discussions based upon observations and experiments with the Window Box Garden and the Competitive Plant Raising be used as a means to further interest in the larger aspect of garden work. Discussion grows out of demonstration and children will engage in the projects set forth both at home and at school.

I. Our Window Box.

1. Soil.

a. Bring samples of soil and test their qualities with reference to texture, retention of moisture, germination.

b. Sift the mixture chosen. Arrange drainage and fill the box.

2. Choice of location.

a. Sunny exposure.

b. Experiment with plants; growing in dark as compared with light.

3. Choice of plants.

a. Determined by exposure; if shady try ferns.

b. Determined by plant qualities; hardiness, rapid and luxuriant growth, blossoming. Fall: geraniums.

c. Determined by school purposes: Spring: a wild flower garden box, or propagation of tomato plants for transplanting.

4. Problem of transplanting: geraniums from garden, ferns or flowers from woods, tomato plants.

5. Care:

a. Sun, air, water, loosening the soil.

b. Regularity. Work of committees.

c Protection from frost and cold during cold days.

II. Competitive Plant Raising: Bachelor's Button.

1. Seed propagation.

2. Soils.

3. Care.

III. Home and School Garden Work:

1. Location, soil and weather conditions, arrangement of beds; considered in relation to plants raised.

2. Plants selected: tomatoes.

a. Easy growers.

b. Early maturity.

3. Propagation.

a. Seed: Bachelor's button.

b. Cuttings: Potatoes.

c. Transplanting: Tomato.

4. Care of plants:

a. Cultivation

b. Protection from exposure to cold and frost

c. Extermination of enemies; potato beetle, tomato worm

5. Enemies: potato beetle; tomato worm.

a. Life history to learn the most vulnerable point of attack.

b. Study in relation to the plant on which it lives.

Observe changes.

6. Helpers: Toads:

a. Observations to learn appearance and nocturnal habits.

b. Usefulness.

c. Encouraged to remain by friendliness.

Birds:

a. List residents and visitors.

b. Study one in detail: the method of obtaining food; nest building; care of brood; means of defense; migration.

c. Encouraged by food, homes, fountains.

7. Food storage in plants:
   a. What: starch, sugar, minerals, water, cellulose.
   b. Where: stems, leaves, roots, tubers, seeds.
   c. Use to plant.
   d. Use we make of food storage.
8. Products of the garden.
   a. Picking tomatoes.
   b. Digging potatoes.
   c. Distribution.

OUR WOODS

A school situated near a woods is rich in the opportunity thus afforded for play, and observation of nature. The mysteries of the woods appeal to the children's imagination, and by means of well-directed excursions, experiments, and discussions of selected interests an intimate acquaintance with woodsy things may be developed, leading to a fuller appreciation of common things. "Go, See, Say, and Do."

I. "Our Woods" from window.

1. Appearance of trees in mass.
   Outline against the sky.
   Colors varied.
   Cause: Cooler air causing descent of sap.
2. Recall appearance of woods in spring, in winter.
   Compare delicate spring tracery, and gray massing of trees in winter, with autumn coloring.

II. Excursion: To know trees in "Our Woods" by name.

1. Name familiar trees.
   Recognition by leaves, shape, bark, fruit.
2. Finding new tree friends.
   Learning to know two or more new ones.
3. Falling leaves, and their work.
   Covering.
   Humus.
4. Collection of leaves by which to test recognition when away from the place in which the tree grows.
   Pressing and mounting and labeling leaves for little children to use in sense games.
5. Class tree selected. Tulip, poplar, hickory, suggested.

III. Individual and class excursions to this chosen tree.

1. Observations: shape, size, height, in relation to other trees; branching; leaves, bark, blossom, fruit or seeds.
2. Dissemination of seeds.
3. Young shoots.
4. Enemies: blight, scale, animals, insects.
5. Tree friends.
   Bird friends.
   Tree frog.

IV. Undergrowth in woods.

1. Classify the growths after excursion.
   Young shoots, bushes, vines, flowers, ferns, grasses.

2. Discuss briefly the home and habits of each class.

V. Bushes and Vines.

1. Compare bush habits with vine habits:
   Bushes low and wide-spreading; sturdy.
   Vines: Yielding stems, clinging tendrils, needing support.
2. Kinds: Familiar.
   How to know each: Grape, honeysuckle, Virginia creeper, poison ivy.
   Leaves, fruit, odor of blossoms, manner of growth.

VI. Study one or two plants in detail. Spring work:

1. Flowering.
   Spring Beauty, or Hepatica, or Violet.
2. Flowerless:
   Ferns, or Indian Pipe.
3. Collect flowers from "Our Woods," press and mount in flower booklet with name and appropriate verse.
4. Wild flower garden.
   Select some plant or plants for transplanting to home or school yard.
   Ferns, violets, Jack-in-the-pulpit, wild geranium.

VII. Bird Friends. Excursion: To know birds in "Our Woods" by name.

1. List familiar birds, noting chief distinguishing feature.
2. By means of pictures learn to recognize and classify the residents; the visitors.
3. Study one bird—the wood-pecker:—
   a. Observe and report upon method of obtaining food, making a home, care of brood, means of defense, appearance.
   b. Habits in relation to the service rendered.
4. Make a chart of "Birds in our Woods." Indicate the name, whether permanent or transient, date of leaving and return, foods, habits, nesting.
5. Looking for discarded nests of "Our Bird Friends."
   Make a collection: hanging nests, nests on limbs, nests in hollow trees, ground nests.

VIII. Animal Friends: Excursion: To know other animals in "Our Woods."

1. List familiar animals seen.
2. Study one animal—chipmunk, or turtle:—
   The home, habits, food, use.

IX. Insects in "Our Woods." Excursion: To find insects useful, beautiful, harmful.

1. List insects found:
   Spiders, firefly, butterfly, moth, tent-caterpillar.
2. Chief characteristics, food, home, habits, use.
3. Home of insects in winter.
4. Study one in detail—spiders or tent-caterpillars.

X. Edible fruits in "Our Woods." Excursion to find seeds, fruits, nuts, and to note dispersal.

1. List nut trees.
   a. Nuts and their coverings.
   b. Dispersal: frost, squirrels, boys.
2. Plant life in pond and on banks.
   a. Water plants.
   b. Ferns.
   c. Willow trees

3. Pebbles in pond or brook.
   Life history of a pebble.

Projects:

1. Excursions for specific purposes; detailed directions given or planned by both teacher and children.
2. Collections of nature products from this area.
3. Booklets of "Flowers Found in our Woods."
4. Bird Charts.
5. An "All the Year Round Story" of "Our Woods." Pictures, pressed flowers and leaves, reports of excursions, appropriate poems, illustrating significant seasonal changes.
6. Wild flower garden in school yard.
7. Starting willow shoots.
8. Collections of stones.
9. Birds' nest — a bird house near school for close observation of a bird family.
10. Bird fountain in school yard to attract bird visitors.

OUR ORCHARD

An orchard is a source of an ever-changing interest, presenting as it does varying aspects during the year. Most children have an acquaintance with one or more fruit trees in their own yards, if not in the orchard. Arouse keen observation of nature activity in relation to these trees and supplement by well-organized excursions to a nearby orchard in the vicinity of the school. Set simple problems which the children can solve by means of observation and experiment. The following problems are suggested.

1. Acquaintance with an apple tree.
2. What is an orchard?
3. What determines the kinds of orchards in this vicinity?
4. What keeps an orchard in good condition?
5. Some enemies to be found in orchards and what to do with them.
6. Some helpers.
7. Profitable fruits to raise.
8. Plant growth in orchards.
9. Fruit-growing in the United States?
10. Orchards of the world.

I. An apple:

1. Observe shape, size, color, skin, pulp, seeds.
2. Study in relation to use.

II. From blossom to fruit:

1. The blossom, fertilization, growth of seed-box, change of color.
   Study each in relation to continuing its kind.
2. Cousins of the apple.
   Peach, pear, plum.
   Comparison and generalization.

III. The apple tree:

1. Field trip to observe shape, size, growth of branches, shape and color of leaves.
2. Recall appearance of tree in its spring dress, of young leaves and numerous blossoms. Compare with its appearance in autumn and note the relation of fruit to blossoms.

3. Contrast pear, peach, and plum, as a further means to gain clear ideas of contour, branching and other characteristics.

IV. The orchard:

Trip to Orchard for observation.

1. Kinds of trees.
   a. List according to their number and production of fruit.
   b. How to know trees; by their fruit, their blossoms, their leaves; their shape and branching.
   c. Collect pictures showing trees in autumn, winter and spring dress.
2. How planted:
   a. In rows, each kind together.
   b. Large orchards of a single kind, as peach, apple.
3. Choice of location.

Dependent upon soil drainage, exposure, prevailing climatic conditions as affecting trees.

V. Propagation:

1. Seeds, shoots, young trees, grafting.
   a. Have a pupil familiar with any one of the methods used tell his experience to the class.
   b. Experiment with raising a peach plant from the seed; a lemon plant.
   c. Experiment with a willow shoot which is easy to grow.
   d. Visit a nursery to get general idea of how trees are started, but do nothing more than give broad generalizations in any case.

VI. Care of trees:

1. Fertilizing soil; cultivation about roots.
   Crops raised in the orchard.
2. Spraying, to kill insects.
3. Pruning, to remove useless branches.
4. Purpose of care:
   To obtain better quality and quantity of fruit.
   To make more beautiful trees.

VII. Growth in orchards:

1. Weeds.
2. Cultivated crops.
   Purpose.
   Kinds requiring shade: cucumbers, pumpkins, squash.
   Grass.

VIII. Visitors to orchard:

1. List the animals, birds, insects, which are found.
   a. Indicate the seasons in which they most frequently appear.
   b. Where found in the orchard.
   c. Recognition of birds common to the locality. Record upon the birdchart.
2. Study one bird in detail. Robin or woodpecker suggested.
   a. Observations made during the year through which the pupil gains an intimate knowledge of this particular bird's habits or ways.
   b. Chief characteristics: appearance, habits, food, nesting, care of young.
3. Bees. A general study suggested in this connection.

IX. Harmful visitants:

1. Insects: coddling moth, apple tree borer, tent caterpillar.
   a. Study the life history of each of these to determine at which point in its existence it can be exterminated with ease.
   b. Field trip planned for purpose of finding and exterminating them.

X. Harvesting of fruit. (*Related Industrial Arts*):

1. Gathering, picking, assorting.
2. Distribution: Packing, shipping.
3. Preservation: Storing, drying, preserving.

XI. Orchards. (*Related Geography*):

1. List of kinds of orchards.
   a. Apple, peach, plum, walnut, olives, in temperate climate.
   b. Orange, lemon, figs, grapefruit, pineapple, banana in hot climate.
2. Orchards in Baltimore County and Maryland.
   a. Kinds of fruit grown.
   b. Location of different fruit-growing sections; importance and distribution.
3. Fruit-growing in the United States:
   a. Location of fruit-growing sections.
   b. Climatic conditions favorable to growth.
   c. Kinds of fruit:
      Apple-growing states: New York, Washington, Oregon.
      Peaches: Maryland, Delaware, New Jersey, Michigan.
      Oranges: California, Florida.
   d. Packing, shipping, distribution.
4. Orchards of the world:
   a. Lemon, orange, and olive groves: Spain, France, Italy, Greece.
   b. Date and cocoanut palms: Palestine, Tropical Islands, Sahara Desert.
   c. Cherry orchards: Japan.
   d. List of manufactured products.

Projects:

1. Excursions:
   a. To observe apple tree.
   b. To observe orchard for various purposes.
   c. To find and exterminate harmful insects.
   d. To observe bird ways.
2. A bird chart recording visitors to orchards.
3. Collections of leaves, of nuts, of leaf buds, blossoms.
4. Collections of pictures showing trees; characteristics.

Related Literature:

Atalanta's Race, Hercules and the Three Golden Apples, Loki and the Magic Apples, The Birds of Killingworth.

Related Composition:

The Apple Tree's Treasure Boxes, Reception Day in the Orchard, Dr. Woodpecker, How Farmer Brown Became Robin's Friend, What the Apple Tree Told Me, Mother's Apple Day, Making Jelly, The Apple Picking Party, Fun in the Orchard, The Fruit that Came Three Thousand Miles.

Related Geography:

I. Soil: Drainage, weather, climatic conditions, atmosphere.
II. Location of fruit-growing sections.
   Railroad trade routes.
   Steamship trade routes.

Related Art:

Objective drawing of fruit, blossom, leaf and tree.
Design from Nature unit used in border or tile. Stencil.
Illustrative: orchard scenes; apple picking; May in the orchard.

OUR PARK

In the city opportunities for out-door nature study are limited to those areas with which children are familiar through play activities, and the park near a school offers a rich field for observation and discussion. In the fall interesting accounts of fun enjoyed at the play ground or swimming pool, or of walks or picnics in the park may be used as a point of departure. Later, excursions for specific purposes may be taken by entire class or committees for observation as a means to stimulate further study. The following large topics are suggestive only, others may be added, and details will be based upon the problems set the pupils.

I. Our Park as a Playground:

1. Purpose.
2. Location.
3. Sites for play spaces.
   a. Dependent upon contour of land.
   b. Relation to the whole.
4. Preparation of grounds.
   For tennis, baseball, picnics, children's playground.
5. Care.
6. Rules to observe.

II. The Park Gardener.

1. The landscape.
   a. Natural means.
   b. Artificial means.
   c. General care.
2. Fall work with flowers and ferns and shrubs.
   Transplanting.
3. Winter care of plants.
   a. Bulbs.
   b. Tropical plants in conservatory.
4. Spring work with flowers, grass, vines, shrubs, trees.

III. Landscape Gardening:

1. Purpose.
2. Means used.
   a. Natural.
   b. Artificial.
3. The work of the park gardener.
   a. General work; care of lawn, trees, flowers.
   b. Special work; at each season: propagation.

IV. Propagation:

1. In fall: transplanting.
2. In winter: Germination of seeds. Conservatory or hot house growth.
3. In spring: Cuttings; transplanting.

V. Trees, Shrubs, and Vines:

1. Ornamental.
2. Useful.
3. Habits.
4. Care.

VI. Flowers and Ferns, and Grasses:

1. Out-of-door gardening.
2. Tropical plants in conservatory.

VII. Insects:
1. Useful.
2. Harmful.

VIII. Our Park as a Home for Animals:
1. Birds.
2. Small animals: chipmunk.
3. Animals of the Zoo.
   a. Lists.
   b. Study one in detail.

THE LAWN

The lawn affords an interesting approach to a number of nature-study problems which can be solved by observation, experiment and discussion, and since the material is within the experience of each pupil, and individual observation can be supplemented by well organized excursions, the work can be concrete and vital throughout the year. The following problems are suggested and others may be added:

a. What makes a lawn attractive?
b. What grasses are best adapted to a lawn?
c. The care a lawn should receive.
d. How to eradicate dandelions.
e. Determine which trees, shrubs, and vines are best suited for decorative purposes.
f. Why are birds and bees welcome visitors?
g. Why are moles troublesome?
h. How do city people make their lawns attractive?
i. How do country people make their lawns attractive?
j. The lawn as a place for social life.

I. Observation at different seasons:
1. Color changes in the landscape.
2. Color changes in lawn and causes given.
3. Determine what a lawn needs at each season to aid in its preservation and beauty.

II. General characteristics:
1. Contour of land:
   Hilly, sloping, terraced, level.
2. Size:
   In suburbs.
   In parks.
3. Drainage.

III. A new lawn:
1. Purpose.
   a. To keep down mud and dust.
   b. To add beauty to surroundings; dependent upon soil, seed and care.
2. Soil.
   a. Kinds: sand, clay, gravel, loam, leaf-mold; mixture of any or all of these.
   b. Test soils to determine qualities best suited to the making of a lawn. Samples of soil in test tubes or jars.

   Observe differences in texture; in color; in power to retain moisture; in presence of vegetable matter; in power to germinate and grow a seed.
3. Soils adapted to lawn growth, determined by observation and experiment:
   a. One that is moderately moist.

b. One inclined to be heavy and compact.
c. Clay loam or sandy loam underlined with clay.

4. Preparation of soils for lawn.
   a. Plowing.
   b. Grading.
   c. Raking.
   d. Filling.
   e. Leveling.
   f. Slope for drainage.
5. Fertilizing the soil:
   a. The necessity.
   b. Various fertilizers used.
6. Planting of grass seed:
   a. Method.
   b. Time of planting.

IV. Selection of grasses:

1. Adapted to lawn.
   a. Those that make close turf.
   b. Those that are drought resistant.
   c. Those with pleasing color that does not change quickly.
   d. Those that grow quickly in spring.
   e. Those that stand repeated clippings with mower.
   f. Mixture of kinds used in most places.
2. Kinds:
   a. Bluegrass.
   b. Redtop.
   c. Rhode Island bent grass.
   d. Creeping bent grass.
   e. White clover.
3. Testing grass seed.

a. Observe samples of grass seeds from a dealer or from Agricultural Department at Washington.

b. Germinate and observe color, texture, rapidity of growth, bunching, effect of want of moisture, exposure to cold, exposure to heat.

Use cigar boxes for the purpose, or out-of-doors experimental bed.

4. How grass propagates itself. Determine by observation on a directed excursion.
   a. Seeds: note quantity, method of dissemination.
   b. Runners: note soil conditions, usually sandy.
   c. Tap roots: note attending difficulty in pulling grass up by the roots.

V. Care of lawn:

1. Watering.
   a. Natural supply; discuss drainage.
   b. Artificial supply; necessity for use.
   c. Proper use of water supply: when to use the hose.
2. Clipping.
   a. When.
   b. How often.
   c. Removing clippings.

3. Extermination of weeds and coarse grasses.
   a. List of weeds.
   b. Study the dandelion to determine how to rid the lawn by knowing its character: the harm it does; why so persistent; seed; root; how removed; uses.

VI. Decoration, or ornamentation of lawn:

1. Visit a lawn to observe what is used for decorative purposes and where used to be effective. Get the idea that both beauty and use are points to be considered.
2. Trees:
   a. Ornamental.
   b. Useful and ornamental.
      List each class.
      Note chief characteristics. Learn to know the more common kinds in all seasons. Collections.
   c. Choose one tree for close observation.
      Become familiar with chief characteristics of shape, leaves, bark, blossoms, seeds.
      How to know trees by their leaves.
3. Shrubs:
   a. Kinds: hedges, flowering shrubs.
   b. Use: to hide ugly places, to give pleasing effects.
   c. Where to place; as borders of walks, lawn in unsightly corners; as a fence.
   d. Care of trees and shrubs.
4. Vines:
   a. Kinds listed.
   b. Vine habits contrasted with the growth of trees and shrubs.
   c. Uses.
   d. Care.
   e. Propagation of strawberry plant by runners.
   f. Experiment with Wandering Jew.
5. Flowers:
   a. Kinds best adapted to growth on lawns, at different seasons. List spring bloomers, summer bloomers, fall bloomers.
   b. Choice of location: as shady spots for ferns, sunny places for cosmos.
   c. Care in spring, in summer, in autumn and winter.
   d. Life history of one flowering plant gained through the Competitive Plant Raising. Propagation by seeds.
6. Other means of propagation:
   a. Bulbs: Recall what children know of bulbs but do not stress it. One pupil may make a report of an experiment with growing bulbs, if desired.
   b. Cuttings desired.
      (1) When the time comes to transplant house plants from the pots to the yard, have reports upon the work done.
      (2) Demonstrate by means of cuttings of geranium, begonia, Wandering Jew—observing growth.
   c. Runners:
      Use a strawberry plant because most accessible.
      Demonstrate in experimental bed at home or at school.
   d. Grafting roses. Observation and report by a pupil to class.
   e. Transplanting:
      (1) Wild flowers in window box and in some spot in school yard, or
      (2) Ferns, in some shady spot.

f. Walks:
(1) Kinds: gravel, brick, concrete.
(2) Where placed.
(3) Care of.

g. Excursion to a neighboring lawn and compare in a general way with the school lawn.
(1) Improvements needed.
(2) Plan to do something to improve the grounds.

VII. Visitors to lawn:

1. List the animals, birds, insects which are found. Indicate the seasons in which they appear. Where found.

2. Study one bird in detail.

a. Observations made during the year through which the pupil gains an intimate knowledge of this bird's ways, or habits, and the relation they bear to his frequent visits.

b. Chief characteristics, appearance, habits, food, nesting.

VIII. Harmful Visitants:

1. Insect pests. Tent-caterpillar. Life history to know at what point to best attack it.

2. Moles. Life history of a mole. Determine whether the animal is helpful or harmful.

Projects:

1. Excursions to school lawn, to home lawn as a basis for study of specific phases of nature study, and for comparisons of general character.
2. Experiments with soils; with different methods of propagation.
3. Collections of grasses, flowers, seeds, leaves, found on lawns. Pressed and mounted.
4. Collections of insects, etc., enemies of trees and shrubs.
5. Collections of pictures of lawns.
6. Flower calendar. Mount pressed flower. date of arrival and habitat.
7. Shrine of beauty; definitely plan to make one spot of the schoolroom beautiful.
8. Bird fountain in school yard to attract bird visitors.

OUR POND

In some localities a running stream or a pond offers an unusual opportunity for observational nature study. The material is varied and interesting, since to the study of nature and life on land is added the study of nature and life in the water. Many interesting problems can be presented for solution.

POND LIFE

That piece of sky let in, that you do call
A pond, but which I know
To be a deep and wondrous world; for I
Have seen the trees within it—marvelous things.
So thick no bird betwixt their leaves could fly
But she would smite her wings:
Go there—I say; stand at the water's brink,
And shoals of spotted grayling you shall see
Basking between the shadows—look, and think
This beauty is for me.

JEAN INGELOW.

AUTUMN

I. Animal Life:

1. Water birds—a list.
   a. Their food, habits, song.
   b. Where they nest.
   c. Migration of these birds.
   d. Where they go—why they leave.
2. Fish: The Minnow.
   a. Skin, gills.
   b. How fish breathe.
   c. How they swim.
   d. Seeing, hearing.
   e. Food eggs. Use of minnow.
   f. A list of fish seen in the pond.

II. Insect Life:

1. Mosquito.
   a. Put wrigglers in a jar. Watch the developments. Transformation into mosquito.
   b. Why a pest.
   c. How exterminated.
2. Turtle.
   a. Covering, food, habits.
   b. Use of turtle.

III. Plant Life:

1. Cat-tails.
   a. Gather leaves for basketry.
   b. Draw or paint leaves and cat-tails.
   c. Where is its blossom? Seed?
   d. A list of other plants on the banks.

IV. Weather conditions:

Rain.
  Evaporation from pond.
  Clouds.
  Precipitation.
Wind.
  Directions.
  Bringing more rain—when?
Geography—Land and water forms. Headlands, islands, isthmus, bay, strait.

WINTER

I. Wintering of pond animals:
Frogs, fish, turtles. Where?
How do they breathe under the frozen pond?
Where are the mosquitoes?

II. Plants:

Resting.
How will they awaken?

III. Ice:
Sports—Skating.
Industry—Cutting of ice. How?
Hauling. Horse. Uses.
Storing.
How can pond ice be pure?

IV. Snow:
Formation.
Uses.

SPRING

I. Animal life:
Duck: Wild and domesticated. Food—how obtained? Covering, habits.
Tadpoles:
Gather frog eggs Note transformation.

II. Plant Life:
Fungi.
How grow? Use.
Gather for globe or aquarium.
Transplant water plants.
Tree:
Willow, budding, leaves, blossoms, seeds, uses. Gather twigs for basketry.
Soil:
Get some soil from pond.
What kind of soil.
Why fertile?

SUMMER

I. Animal Life:
Birds: Crane.
Appearance.
Food.
How fitted to be a water bird.
Insects: Dragon fly.
Watch the different stages.
Beaver:
Appearance.
Why like the pond?
How build?
Uses.

II. Plant Life.
Water lilies:
How different from land lilies, long hollow stems—floating leaves.

Geography: Inlets and outlets of pond.
How was our pond formed?

Projects:

1. Make excursions to the pond for observation of specific objects.
2. Place minnows in glass jar or aquarium for observation.
3. Make a basket from cat-tail leaves. See Industrial Arts.
4. Place willow twigs in water or soil and note growth.
5. Make a book containing plants, flowers, growing in the region of the pond.

6. Make a book of sketches indicating the different phases of pond life observed during the year.

7. Collect and arrange on charts, flowers and plants, as follows: Swamp plants, plants found in the woods, in open sandy places. Classify according to stem habits.

8. Transplant ferns to a home garden or shady spot in the school yard.

9 Build a bird fountain in the school yard.

NATURE STUDY: GRAMMAR GRADES

SUGGESTONS FOR TEACHING NATURE STUDY IN THE GRAMMAR GRADES

FIFTH GRADE

A Local Study. "Nature study is necessarily restricted in the materials it uses to those which any particular environment affords. Hence the details of nature study courses must differ widely. The objects of nature which are of special interest in one community may be entirely lacking in another. In one community the outdoor interest may center in the forest, in another in the prairie, in another in the fields and the gardens, or in another in the seashore. But amid these widely different details as to the materials which nature study uses the same purpose runs and the same results are to be obtained. It is this great variety in the details that baffles many teachers who are more accustomed to follow directions than to formulate them. But it is one of the strong arguments of the advocates of nature study that it is a subject whose very nature requires its teachers to be initiators rather than imitators. And a teacher's growth in efficiency depends in part upon the compulsion to initiate in some directions rather than to imitate."—Coulter and Patterson: *Practical Nature Study;* pp. 14–15.

Our resources for nature study materials in Baltimore County are indeed great, in the main. Our rural sections are a laboratory of everyday experiences with animals and plants that are the source of our everyday food supply, clothing, and shelter; animals and insects, plants and herbs that are beneficial or injurious to the production of these sources; wild flowers and plants that make our parks and gardens beautiful; and animals that make good pets. The most appropriate and educative work for these sections is elementary agriculture and the motivation is best made by means of the corn and canning club movement. Our suburban sections, in the main, contribute almost the same experiences that are met in the rural sections. Our strictly urban sections, Highlandtown and Canton, particularly, may not seem at first sight to possess resources with their rows and rows of brick houses and their very small back yard lots and gardens. But Patterson Park is very close and this

is not to be despised as a real laboratory for nature study excursions and experiences. The Patapsco River is not far away and its waters and its life can become the supply for aquaria and the study of water food stuffs.

The revision committee this year recommends that the materials assembled in the old course of study under nature study, viz., weather conditions, physics, public or civic sanitation, and nature study proper, be now distributed, and each topic assigned to the subject to which it most largely contributes. For example—weather observations will be included in the geography outline, physics in the physics course, and sanitation under civics. The bulk of the observational nature study, the committee believes, should then be accomplished by the end of the fifth year. According to this plan there is no nature study course, as such, after the fifth grade. The sixth grade gets an introduction to science in its cookery and manual training, and a little of biology in its civics when it takes up a detailed study of the fly in its relation to the diseases of mankind. The seventh grade takes up about twenty experiments in physics and the eighth grade builds upon these in physics and mechanics.

It has been suggested that we organize our work for the year around some nature study projects. This is a distinct advance over the third grade procedure and continues and builds upon the projects of the fourth grade—our fields, our orchard, our lawn, our garden, our park, our pond. The following are the projects suggested as the basis for selection for the fifth grade; the outlines having been worked out by members of the revision committee:—

1. The excursion or the hike.
2. The vivarium.
3. The Audubon Society.
4. Humane Society.
5. School and home gardens and window-boxes.
6. Patrons' association prizes for school nature collections.
7. Beautifying the school grounds—laying out the lawn.
8. Sky observations.
9. Corn Clubs and Canning Clubs.
10. Maps of the vicinity (to scale, radius of one mile), with trees, hills, streams, ponds, quarries, etc. noted.

NOTE: Choose not more than four projects for any one year. One project is sufficient if it presents phases that need to be studied for seasonal changes.

Time allotment: Two 25 minute periods per week or longer if other related projects grow out of the nature study topic.

THE HIKE

BY LILLIAN HERRERA, HIGHLANDTOWN SCHOOL, AND RHONA GAYLEARD, VIOLETVILLE SCHOOL

The excursion has become the recognized basis for the study of home geography. An outline for the principal points to be observed may be placed in a notebook so as to give definite views for the work. The nature study hike should be carefully planned (the child may or may not take a notebook according to the judgment of the teacher) Voluntary and happy observations from the pupils will open many avenues of interest and become the subject for further study.

A system of credits for valuable observations will be a strong incentive for the stalking or hike.

If we are studying our vicinity within a radius of a mile, then a plan to visit certain sections for a well-defined purpose would be advisable, and a second visit to show change or development in the subject may be necessary. Suppose we select the woods.

I. Project—The appearance of the woods in autumn clothes.

1. Note foliage in September.
2. Note changes after the lapse of a week or after a frost, note falling leaves.
3. Buds placed away for the winter.
4. Winter observations.
5. Spring buds, sap, etc.
6. Appearance of trees in spring.
7. Maps or chart of trees located on the hike.

II. Project—Some particular tree.

1. Credits given for a fairly good record of the changes and development of a particular tree during each month of the year.
2. When there was apparently a sameness. Why?
3. The festival seasons of the tree.
4. Purpose of the tree.

III. Project—Map or chart showing the development of the vicinity in its attempt at improving and beautifying its conditions.

1. Give credits to pupils who draw a chart showing what would improve the appearance of the community.
2. Locate the ten prettiest places in the community and describe what makes them so. Tell the appearance during each season of the year. When in its glory?

NOTE: The Boy Scouts movement makes use of the hike in a real educative way.

VIVARIUM AND AQUARIUM

BY LILLIAN HERRERA, HIGHLANDTOWN SCHOOL

"No one piece of nature study apparatus is capable of serving so many and so various uses as an aquarium. It may be used wet or dry; filled with water it becomes the means of practical acquaintance with all kinds of aquatic life, both plant and animal; managed as a vivarium or terrarium it makes a fine insect-breeding case, a fernery, a place for a collection of living mosses, the home of frogs, tree frogs, turtles, salamanders, snakes, slugs and land snails. With one end arranged for water and the other for land, and filled with mosses and ferns, pitcher plants and . . . . dews it may be at once a paradise for all kinds of things, both aquatic and terrestrial. Filled with earth, it may be used to germinate seeds in. By planting them against the glass and darkening with a black cloth we may study 'root and all' in its natural

environment, observe the root systems of various plants, and make all sorts of interesting experiments. If we wish we may plant a hill of potatoes; and we may certainly plant against the glass all sorts of seeds of our forest, fruit, and nut trees." Hodge, *Nature Study and Life*, p. 393.

Project I:

I. The making of an aquarium.
(See Hodge, p. 394–396.)

II. Filling the aquarium.
1. Sand.
2. Plants.
3. Pebbles.
4. Snails and a few tadpoles.
5. Plants and animals brought by the children.

III. Care of the aquarium—(Assign the duties of caring for the aquarium to committees of children).
1. Feeding of the animals.
2. Removal of the surplus food with a siphon or dripping tube.
3. Shallow dip net to catch specimens.
4. Snails to keep off algae or scum on sides of the aquarium.
5. Use of nail brush or mop when necessary.

IV. Proper food for aquaria.
1. Fine vermicelli for gold fish.
2. Scraped lean beef for sunfish and paradise fish.
3. Ant eggs and powdered dog biscuit will suit many fish.

V. The tadpole makes an interesting subject for study.

REFERENCES: *Home Aquarium and How to Care for it*, Eugene Smith, 1902, Pub. Dutton, New York, Price $1.20. *Book of Aquaria by Bateman and Bennett*, 1890, Pub. L. Upcott Gill, 170 Strand, London, Price $1.40. *Gold Fish Breeds and Other Aquarium Fishes*, H. T. Wolf, Pub. Innes & Sons, Philadelphia, Price $3.00. *Familiar Fish, Their Habits and Capture*, Eugene McCarthy, Price $1.50.

Project II:

Mosquitoes and the aquarium.

If the classroom is well supplied with specimens, the children may learn by observation their habits, likes and dislikes, food, care, uses.

In September a family of wrigglers from some pond or rain barrel may be obtained, then placed in the aquarium with a pipette in a homeopathic vial; fill the vial three-fourths full of water and cork it. Pass it around with a hand lens and give each pupil a chance to observe it. Note the following:

1. The larva.
2. The pupa stage.
3. The adult mosquito.
4. Mosquitoes and health problems.
5. Exterminating mosquitoes.

Project III:

House Flies—September and October and the spring.

Problem:

How to get rid of the flies which infest our homes.

The children can make breeding experiments with flies. If a fish head or a piece of fresh meat be exposed for a while in warm weather, it will generally be found to

have masses of whitish-yellow eggs, which are blow-fly eggs. The four stages in the life of the fly observed.

1. Eggs.
2. Larva or maggot.
3. Pupa.
4. Fly.

Study the breeding places of flies.

Project IV:

The Crecropia Moth and the Terrarium.

Fall of year—Locate the cocoons, then bring the specimens to school and keep in a cool place or outside where the cocoon receives moisture. In March, place them in the terrarium so they may emerge in their normal season, feed them with honey, poplar or lilac leaves; after observing the stages of development, let them go, or make a chart showing the cocoon, silky bed, chrysalis, and the full-grown moth.

Making the cage—feeding the moth, observation of habits, making of charts, research work from reference libraries and encyclopedias.

REFERENCE: Anna Botsford Comstock, *Handbook of Nature Study*, pp. 330–335.

NOTE: The life habits of the terrapin, the turtle, and the rabbit in the terrarium afford possible topics for the year's work.

THE AUDUBON SOCIETY

BY EDITH LAWSON, HOWARD PARK SCHOOL

Since birds form an interesting part of nature study an effective way to study them is through the Audubon Society. There is a difference between a society and a forty-five minute study of birds. The very fact that children are members of a society awakens a responsibility toward birds that they otherwise would not feel. Usually the children who take intense interest in birds lead in the work anyway and they can do much better if allowed to organize the class so that each member will feel his share of the responsibility about studying the value and care of birds.

I. Aim of the Society:

"To stimulate love and interest in birds, by giving a special scheduled time for the meetings, and exchanging ideas in an organized way, that will result in a general knowledge and care for our feathered friends in the community."

II. Introduction:

1. Value of birds.
   a. Aesthetic.
      (1) Songs.
      (2) Vivid colors.
   b. Economical.
      (1) Facts proving the destruction of injurious insects—viz., tree sparrows, quail, robins, woodpeckers.
2. What a bird really is.
   a. Compare parts of bird to human form.
   b. Common hen as type.
      (1) Feathers as clothing.
      (2) Feathers as ornaments.
      (3) Brightness of male bird's coat.
   c. How birds fly.
   d. Eyes and ears of birds.

e. The form and use of beaks.
Compare beak of robin, humming bird, duck and eagle.
f. Feet of birds.
Birds that run, hop, scratch, wade, etc.
g. Bird ways and habits.
(1) Songs and calls.
(2) Where seen: top of tree, lower branches of tree, on ground.

3. Recognition of common birds: woodpecker, flicker, lark, blue jay, crow, sparrow, cedar bird, cardinal, wren, chickadee, robin, bluebird.
a. By song.
b. By nest.
c. By coat.

4. Individuality of structure of nests. (This is good for fall work since there are then many nests to be found)

5. Summer residents.

6. Winter residents. (Keep chart of each.)

7. Care of birds—attraction to homes.
a. Discourage destruction of birds and their nests.
b. Encourage destruction of bird-enemies
c. Supply food when necessary—winter.
d. Build suitable houses or nesting places.
(1) Ventilation considered.
(2) Size and position of entrance considered.
(3) Drainage.
(4) Means of cleaning.
(5) Color of house.

The building of the house may be successfully handled as a contest between the different classes in the school. In this way the work of the Society is made known throughout the neighborhood; community co-operation is thereby established.

The topic correlates well with the fifth grade study of *wood* in the industrial arts course under the topic of "shelter" or with *concrete*, another of the building materials.

HUMANE SOCIETY OR BAND OF MERCY

BY FLORENCE MARTIN, CANTON NO. 1 SCHOOL

The following letter explains itself. The formation of a Humane Society may become the basis for studying the animals that are useful to man and those that he loves as pets:

MISS FLORENCE MARTIN,
School No. 1, Canton, Md.

MY DEAR MADAM:

Replying to your letter of June 1, would say that under separate cover I am sending you literature that I feel sure will prove helpful to you in introducing humane work in your school, and would call special attention to the leaflet, "How to Form Bands of Mercy," in which you will find full instructions for organizing, and directions for reporting any bands so formed to this office that they may receive the free outfit which we offer to all bands sent in to us. I have no doubt you will find it very easy to interest your children in humane education. This can be done through nature work, and I would suggest that you have them provide watering places for small animals and birds, and see that they are kept clean and full. A child is always more interested in anything practical. If you are not already familiar with the color-

ed prints of birds furnished by the National Association of Audubon Societies, 1974 Broadway, New York City, I think you would be interested in getting in touch with them.

Sincerely appreciating your interest, and with best wishes, I am,

Yours cordially,

GUY RICHARDSON,
Secretary.
B.

From the Massachusetts Society for the Prevention of Cruelty to Animals; the Angell Memorial Animal Hospital; American Humane Education Society, 170-184 Longwood Avenue, Fenway Station, Boston, Mass.

SCHOOL AND HOME GARDENS AND WINDOW BOXES

BY ELENA FORESTI, PIMLICO SCHOOL

Gardening:

"Actually to grow a plant is to come into intimate contact with a specific bit of nature.

"The working plan for school gardens must have relation to the economic and social conditions under which the school exists. The purpose may be analyzed as follows:

1. "Ornamenting the grounds, comprising (a) cleaning and tidying them, (b) securing a lawn, (c) planting. This is always the first thing to be done. It stands for ideals of thrift, cleanliness, comfort, beauty, progressiveness.

2. "Establishing a collection to supply material for nature-study and class work.

3. "Making a garden for the purpose of (a) supplying materials (as in No. 2), (b) affording manual-training, object lessons and instruction in plant-growing, (c) teaching agriculture and horticulture.

"The school garden is for the purpose of direct instruction. It is an outdoor laboratory. It is part of the school equipment, as books, blackboards, charts and apparatus are. The real school garden is not adapted to all schools; or, to speak more correctly, not all schools are yet adapted to the school garden any more than they are all adapted to an equipment in physics or chemistry. The making of a definite garden is an epoch in the life of each school; it marks the progress of the school in pedagogical ideals."—Bailey, The Nature Study Idea.

GARDEN PROJECT OUTLINED

I. Laying out beds.

II. Study of soil:

1. Relation of soil to plants.
2. Soil as a storehouse for water.
3. Plant food in solution.
4. Air essential to growth.
5. Soil and water supply.
6. Replenishing soil.

III. Methods and materials:

1. Types of plants for garden.
   a. Vegetables and flowers.
      (1) Reasons for selection.
      (2) How to plant with reference to needs and beauty.

(3) Rotation of crops.
(4) Cultivation suggestions.

2. Study of plants.

a. Function of parts and relation to each other—Roots, stems, leaves, seeds (seed germination).

b. Study of cuttings and grafting.

3. Plant enemies and friends.

Those common in neighborhood.

Project II: Window Boxes:

1. Made by the class preferably in the industrial arts period.

2. The outline is the same, in the main as for home and school gardens, except in the selection of plants.

N. B. This outline was taken mainly from Farmer's Bulletin No. 218, School Gardens, U. S. Department of Agriculture.

PRIZE CONTESTS FOR SCHOOL COLLECTIONS

BY DENA AITCHESON, FULLERTON SCHOOL

A trophy, to be decided upon by the proper authorities, is to be awarded at the end of the school year to the pupil or the class which presents the best arranged and most complete collection of one or more materials from the following list:

Each teacher should select the one or two subjects for special study that are best suited to the environment of the school and the homes of the pupils.

1. Herbarium.
2. Trees—fall and spring leaves; bark and cross sections of each kind of tree.
3. Butterflies—properly mounted.
4. Insects—harmless kinds; greatest variety; properly mounted.
5. Minerals—kinds and composition; specimens properly labeled.
6. Birds' nests—native; habits; color; collection of nests; identification of bird with nests.
7. Plant raising contests.

Pupils should also be taught about dangerous bees and insects and the injurious plants, weeds, etc. Whichever groups are selected for collection, simple knowledge of the characteristics should be given after as much directed study in the open, as possible, has been carried on through the excursion or hike.

REFERENCE: Holtz, *Nature Study*, Scribner's.

IMPROVING AND BEAUTIFYING THE SCHOOL GROUNDS

BY OLIVIA HERSHNER, GOVANS SCHOOL, AND ANNA PADIAN, EVERGREEN SCHOOL

"The first category—the improvement of the premises—is of universal application. Every school-ground can be picked up, slicked up and made fit for children to see. There are three stages or epochs in the improvement of any ground: cleaning up; grading and seeding; planting. To improve the school-grounds should be a matter of neighborhood pride. It is an expression of the people's interest in the things that are the people's.

"The first thing to do is to arouse the public conscience. Begin with the children. As soon as they are directed to see the conditions they will believe what they see. They are not prejudiced. They will talk about it; teacher, mother, father will hear. Get the children enthusiastic—it is easy to do—in removing stones and litter and rubbish, in filling in the holes, piling the wood, raking the grounds.

"The cleaning up once done, and the civic pride once aroused to a pitch of keeping it done, the next thing to do is to make a base or foundation upon which all the gar-

dening or planting features are to stand; the land must be graded. In some cases the soil must be removed and new soil put in its place, for the soil about a schoolhouse is very likely to be poor sand or clay, or a mixture with building material and other things; but in general this labor will not be necessary if only a lawn and ornamental planting are desired. In some instances a lawn is impractical, but a good and even earth surface should always be secured. The early spring is the season in which to do all this shaping and seeding of the land. The spring fever is on and enthusiasm is new born. If the school is in the country, the farmers can be interested to do the heavy work. If the subject has been well discussed in the school for some weeks or months, it should not be difficult to organize the farmers into a 'bee' to grade, till and seed the ground. . . . . "The next year plant. Let the matter be discussed in school. Ask the children to make plans. When the time is ready choose the simplest plan that seems to fulfill the requirements. Remember that during a large part of the year the school ground will be practically without care. The planting must be able to maintain itself; if necessary, cover the outbuildings with vines, and screen them with bushes or trees. Use chiefly hardy and well-known trees and shrubs and herbs. Aim to have the grounds interesting because it appeals to the onlooker as a picture as a whole and not as a collection of plants."—Bailey: *The Nature Study Idea.*

BEAUTIFYING THE SCHOOL GROUNDS

I. Laying out the ground (the plan):
1. Grading.
2. Drainage.
3. Walks.

II. Preparation of the soil:
1. Native soil.
   a. Top-dress with manure; plow under.
   b. In spring top-dress with well-composted manure; cross plow; harrow and roll.
2. When graded and filled in—
   a. Allow soil to settle.
   b. Plant corn or potatoes to reduce weeds.
   c. Apply fertilizers.

III. Kinds of soil:
1. Fine, sandy loam over clay subsoil. (Experiment with different kinds to see which holds water best.)
2. One or two feet deep.
3. Earth from building foundations is unsuited for the purpose.
4. Study earthworms as tillers of the soil.

IV. Fertilizers:
1. Old, well composted manure.
2. Commercial fertilizers with lime and bone (before seeding).
3. After grass has started use land plaster, bone meal, nitrate of soda, hard-wood ashes.
4. Fertilizers most generally used in shade or sun: bone meal, hard-wood ashes, lime.

V. Lawn grasses:
1. Color—"Kentucky blue grass" the standard.
2. Texture—fine, soft, bent grass the standard.

3. Turf-forming—a single variety produces the best turf.
4. Varieties—
"Kentucky blue grass," creeping, bent.
Rhode Island bent.
White clover and "Kentucky blue grass."
Canadian blue grass.

VI. Amount of Seed:

1. Fertile land requires less than poor land.
2. Fifty to sixty pounds to the acre, or one and a half pounds to one hundred square yards.

VII. Season for planting:

1. Early spring.
2. Early fall.

VIII. Seeding:

1. Sown evenly—calm weather before a rain.
2. Roll to cover.
3. Cover one-eighth inch, or not at all according to variety.

IX. Cutting Lawn:

1. Eighty times a year—every week or ten days in summer.
2. Number of times depends upon character of season and amount of irrigation.
3. Frequent mowing and rolling produces finer and better turf.
4. Spring and fall—close cutting.
5. Mid-summer—not so close.

X. Chief obstacles to overcome:

1. Drought.
2. Moles and gophers.
3. Weeds.
4. Wild grasses.
5. Ants.

XI. Some enemies of the lawn:

1. Weeds, as white clover, dandelions (compare with some other composite flowers—thistle, bachelor's button, daisy, and aster.)
2. Insects, worms (army worm), ant, and ground-mole.

XII. Beautifying the lawn:

1. Arrangement of trees, shrubs, vines, flower beds, and walks (Have pictures brought showing lawns designed for suburbs.)
2. Make a study of vines.
3. Competitive plant raising.
4. Arbor Day celebration.

REFERENCE: Comstock, *Handbook of Nature Study*.

SKY-STUDY

BY FREDA SIGMUND, HIGHLANDTOWN SCHOOL

"The stars are a constant reminder to us of the thousands of worlds outside our own, and looking at them intelligently, lifts us out of ourselves in wonder and admiration for the infinity of the universe, and serves to make our own cares and trials seem trivial."

Before any project can be undertaken a general knowledge of the unimaginable size of the universe should be given, together with some idea of the light-year, the

ever-moving characteristic of the stars, the relative ages of stars, and the multiplicity of the heavenly bodies.

Project I:

The Big Dipper and the other polar constellations are the night clocks of the sailors of the northern hemisphere. Let us see if we can tell time by them.

1. Observe the Big Dipper every night for one week, if possible at intervals of four hours.

2. Observe it on the same night of each month for the year. Then make at least five charts showing the relative position of the Polar Star and the Dipper.

Deductions:

a. The Big Dipper rises about four minutes earlier each day or about two hours earlier each month.

b. The Big Dipper *seems* to revolve around the Polar Star once every twenty-four hours (caused by the earth's revolution).

c. The Big Dipper revolves in the opposite direction from the hands of the clock.

d. In January the Big Dipper is east of the Polar Star with handle down, while in July at the same hour it is west of the Polar Star with handle up.

Project II:

To learn some of the constellations about the Polar Star.

1. The Little Dipper.
2. Cassiopeia's Chair.
3. Cepheus.
4. The Dragon.

These constellations never rise or set in our latitude but seem to swing around the North Star once in twenty-four hours.

With this study the child should be taught how to draw an imaginary straight line from one star to another and to perceive the angles which such lines make when they meet at a given star.

Project III:

(January, February, March.) Study Orion in the southern half of the heavens. It is one of the most beautiful of the constellations.

In conjunction with this the splendid red star, Betelgeuse, the white star, Rigel, and the wonderful Pleiades, can be studied.

Project IV:

A summer chart and a winter chart would be well worth while.

Project V:

Observe the moon as often as possible for a month, beginning with the full moon. Let the children learn the phases of the moon.

In connection with this the children should look for the "Lady in the Moon" and thus be introduced to the physical geography of the moon in a very general way.

Project VI:

The sundial—the class can make a sundial to place somewhere on the school ground. This can be done during the geometry, geography, or nature study period.

A careful study of the shadow should be kept until the children see that the sun travels a path that is higher across the sky in June than the path it follows in December.

Project VII:

Study the kinds and names of cloud forms. By observation and records tell which clouds bring rainy, cloudy, and fair weather.

REFERENCE: Based largely upon Comstock, "*Handbook of Nature Study*," Comstock Pub. Co., Ithaca, New York.

OUR CANNING AND CORN CLUBS

Many corn clubs are in operation in the schools of the County—particularly in the rural sections, and even such village schools as Catonsville with its large suburban population have seen the advantage of corn clubs and have used the project to further economic and agricultural interests of the community. Of the status of canning clubs, Miss Katherine Braithwaite, formerly instructor in Household Economics in the Catonsville High School, now Home Demonstrator for Baltimore County, makes the following statement:

The canning club movement in Baltimore County is yet in its infancy, but we are hoping much for it. Briefly stated, the purpose of the clubs is two-fold as I see it:

1. To bring the college to the farm wife, by teaching her daughter the most approved methods of work.

2. To make farm life more attractive to the county girl, by opening up new channels for increasing her income.

In organizing the clubs I have selected those rural schools where household arts is not taught. That the work may carry over into the regular school work during the winter, we plan to serve hot soup at noon, the soup mixture being canned by the club during the summer. Simple demonstrations in cooking will be given, also training in the serving of lunches.

At present I meet the clubs for one hour twice a month. The first fifteen minutes is given to the club meeting conducted by the president; a report is made by each member of the progress of her garden work, and garden literature, record books, etc., are given out. The meeting is then turned over to me for a sewing period. Canning demonstrations will be given during the summer.

The activities of the club are as follows:

1. Cultivation of one tenth acre of land.
2. Canning of 75 containers of fruit and vegetables.
3. Sewing.

The following clubs have been organized in the County.

White Schools		Colored Schools	
1. Granite	(Enrolled 18)	7. Roslyn	(Enrolled 16)
2. Perry Hall	(Enrolled 23)	8. Sparks	(Enrolled 16)
3. Fowblesburg	(Enrolled 19)		
4. Boring	(Enrolled 9)		
5. Cowenton			
6. Poplar.			

I notice much initiative displayed in conducting meetings in those schools where Junior Children's Aid Societies are organized, Perry Hall for example.

The meetings during the summer when food will be canned will be two hours long. The bulk of the canning will be done in the individual homes. I shall visit the homes and gardens of the club members during the canning season.

The work among the colored people last year is really bearing fruit this year.

A MAP OR CHART OF THE VICINITY

BY MAY FALLON, MT. WASHINGTON SCHOOL

Project:

Draw to scale the area included within a radius of a mile of the school house.

Locate:

1. The main and interesting trees.
2. The roads.
3. The wood paths.
4. The hills, with altitude (approximately).
5. Haunts of wood animals.
6. Tracks of wood animals.
7. Home of wild flowers.
8. Ponds and rills.
9. Haunts of birds.

The "Boy Scout" publications should prove helpful in this project.

REFERENCE BOOKS: Bailey, *The Nature Study Idea*, Macmillan Co.; Coulter and Patterson, *Practical Nature Study*, Appleton; Comstock, *Handbook of Nature Study*, Comstock Pub. Co., Ithaca, N. Y.; Holtz, *Nature Study*, Scribner; Bigelow, M. A. and Bigelow, A. A., *Introduction to Biology*, Macmillan Co.; Hodge, *Nature Study and Life*, Ginn; Wilson and Wilson, *The Motivation of School Work*, Houghton.

ARITHMETIC

PRIMARY GRADES

Arithmetic presents two aspects of number determined by *how many* and *how much*, the one containing the idea of counting, the other, the idea of measuring, upon which much of our work is based. These two fundamental ideas call for experience with things in school and out, through which a definite comprehension of the world on the quantitative side is gained. The tendency today is to relate arithmetic to the common, familiar affairs of the life about us, so problems are introduced, almost from the beginning, which grow out of real situations, thereby adding interest to mechanical routine. Motivated drills to secure accuracy and speed are recognized as valuable and rise to their greatest height for whole numbers, in the third and fourth grades where mechanical work of this nature in the fundamentals makes its strongest appeal.

Clearness in thinking and accuracy in expression, both oral and written, are prime requisites. The language of arithmetic should become familiar through oral discussion and concrete illustration. For this and other reasons oral work should take precedence over written in the primary grades. A teacher should be acquainted with needs and purposes of the work of the succeeding grades in order to make the proper approach without waste of time and energy. Care is taken to keep the work of each grade within the limits of the child's ability. To teach a subject prematurely often causes arrested development.

The purpose of each recitation should be clearly defined in the teacher's mind. Lesson plans in arithmetic are as essential as in history: a part of the time devoted to drill and review and a part to developmental work. Means and methods must vary with the subject, the class, and the individual. In the well-organized recitation all pupils are actively employed. It is a mistake to teach one or two children and leave the rest to cultivate the habit of inattention and aimless mind wandering. Arithmetic should cultivate the power of application, sustained attention and concentration of effort to a definite end.

Development Lessons. Accuracy and facility are essentials. The steps are presentation, application, testing, helping the pupil to find his own point of difficulty, and applying the remedy. The plan should carry forward from the known to the unknown by means of concrete materials and blackboard illustration the points

which train in thinking. Careful, painstaking habits, clear reasoning without confusion of words based on a knowledge of arithmetical facts are means to this end. Careless, slovenly thinking on the part of a teacher tends to impress the same habits in the pupil. Train children to be self-reliant by developing confidence and certainty in one's work. Accuracy shall be considered first, then facility. Speed is gained only when the steps in the process of thinking have been made clear. Teach first, then drill.

Drill Lessons. Drill is important to fix what has been understood. Drill work motivated through simple contests of time and skill, various devices of card, blackboard and games should be freely used. Systematic reviews are essential, since frequency and recency of recall insure retention in the memory. Intelligent drill is absolutely essential, the teacher being a master of drill, and not a drill master.

Oral and written work. Oral work should consume practically all of the period of recitation in first and second grades, three-fourths of the time in third and in fourth, and should lead to an increasing independence of paper and pencil in computation. Only such work as cannot be done mentally should be recorded on paper.

Individual needs. Failures in classes should be met by a carefull diagnosis of the trouble: viz., lack of knowledge of the processes, lack of drill, lack of ability to reason, or inability to compute. Each group should receive special attention at stated intervals, using a class period once a week for special work of this nature. By this means greater uniformity of result may be secured. Simple practice tests in the fundamental processes and tests for measuring arithmetical ability should be given at stated intervals by which to determine growth. Graphic representation of individual and class results stimulates effort in the attainment of automatic control.

REFERENCE BOOKS: Smith, *The Teaching of Arithmetic;* Brown and Coffman, *How to Teach Arithmetic;* McClellan and Dewey, *The Psychology of Number;* all modern arithmetics, for the study of the author's purpose and methods of development. Read prefaces, introductions, and teachers' manuals.

FIRST GRADE

Children love rhythmic repetitions in form, in color, in sound, or in motions. They love to play games and keep score; they love to barter; and through these interests and acquaintance with number ideas along the same lines can be presented with ease, interest, and profit. Interest in number is as pleasurable and spontaneous as interest in learning to read, and should begin about the same period of the child's life. The so-called number faculty is present. Counting is enjoyed by most children but this is no conclusive evidence

that number work should begin seriously the first year. It does indicate that we should not wholly eliminate it, but rather so direct the activity in number relations that growth is possible, and that injurious habits or attitudes are avoided.

Much stress will be placed on simple number games in which counting and measuring are combined. Counting at first with things, and later without them, affords opportunity for placing numbers in a series. Number games with domino cards, and other devices, with a leader keeping score, will lead easily and naturally to simple combinations, and to learning to write figures. No attempt will be made to give formal work, but when there is opportunity for presenting number ideas in relation to the story, the game, the garden work, the industrial arts, and schoolroom activities, as in distributing and collecting or any material in counting, or anything which will further that work, it will be utilized by the teacher. In the second half year certain definite periods shall be set aside for a series of number games and plays, through which certain number facts are to be gained. Drills upon these facts will be given at intervals, but always as games, never as formal work.

One of the chief reasons for delaying the regular number work in the first half year is the language difficulty. The time is most wisely spent upon reading and language, and in giving children experience which clarifies the language of arithmetic.

Seatwork should emphasize rhythmical repetition of number and form through the use of lentils, seeds, sticks, paper in border units; translations from object to pictorial symbol, to conventional symbol in word and figures; records of simple combinations in keeping scores. Most of the work should be with objects until children have learned the relative value of numbers 1 to 10. All seatwork should tend to strengthen accuracy, ease and skill, and therefore no written symbols should be employed until the corresponding number idea is clearly defined in the child's mind.

After the names of numbers are learned, there will be a tendency to copy names without reference to numbers of objects which they represent. This should be avoided. Comprehension of number ideas rests upon objective work in this grade, and furnishes the basis for the real number work in the next grade.

REFERENCE BOOKS: Davidson, *First Lessons in Number*; Harris and Waldo, *First Journeys in Number Land*; Hoyt and Peet, *Every-day Arithmetic*; Smith, *Arithmetic Games*; Johnson, *Education by Plays and Games*.

Time allotment: Two 15 minute periods or 30 minutes per week.

FIRST HALF YEAR

No formal number work. Number ideas presented informally in counting, number games and incidentally in other lessons.

Second Half Year

1. Counting. Let the children count from 1 to 10, by ones; from 10 to 100 by tens. Count the children who are absent, number of rows of desks, rainy and sunshiny days, pages of a book, numbers on a calendar, street numbers on doors. Count by 1's, by 2's, as—children marching by. Count by 2's forward and backward; by 1's, 2's, 5's, 10's, 15's, 20's—to 50, 100.

2. Addition. Let the children learn the obvious combinations of two numbers through manipulation of materials in making borders with seeds, lentils, sticks, tablets, nature materials, and through games.

3. Subtraction. Teach the inverse cases of addition, work for speed and facility in both addition, subtraction, through handling a variety of material.

4. Measures. Children will have occasion to handle the ruler, to talk about the inch, the six inch; the pint, the quart, the pound, the dozen, the half dozen; to spend a cent, a nickel, a dime, a dollar; to name and number the days of the week, the month. Let them gain some idea of the units of measures through rational experiences. Initiative on the part of the children in suggesting number tests is encouraged.

5. Symbols. Present the symbols 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 for recognition when the opportunity offers. Teach children how to write figures correctly.

6. Problems. Give many oral problems involving one operation, connected with industrial arts, with school activities, with games.

7. Games. Such games as Tossing the Ball, and counting, Bean Bag, Ring Toss, Target, etc., in which simple scores are kept.

Number Through Games

In introducing number in the first grade through the medium of games the purpose is:

a. To create a social situation, i. e., a situation where there is a real need for number.

b. To present work through the concrete; believing in the theory that objects do not necessarily make a problem concrete, only the problem that is real being concrete to the child.

c. To get the greatest amount of effort the class is capable of in solving problems for themselves.

Points to be observed in presenting number through games.

1. Divide children into groups, not more than fifteen or sixteen in a group. One group plays one day while other groups have seat work (not necessarily number). Thus each group plays every two

or three days. Too many children in a group make the game uninteresting. Maintain intense interest thus securing supreme effort. Let children as they finish seatwork observe the game.

2. Let children keep their own score no matter how long it takes to place initials and record score. Help them *without comment* when they need help.

3. If children cannot give score help them by placing number of points scored on floor or blackboard as—

Mary, 11
Susan, 111
Fred, 1

and letting them count with you. Soon they can count abstractly with ease.

4. Later on when children have some ability in counting scores let no child claim his score unless he can count it correctly.

5. Later the seatwork may be based on the games, as adding combinations used in game, keeping scores, etc. Let the *game* come *first* and have *many* games before written work is required.

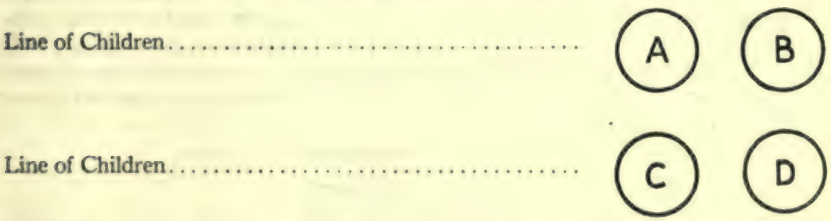
6. Remember that the game is a game, not a lesson to the child. Play the game for the game's sake. Those who play hardest will work hardest in counting scores. The power of concentrated effort to count scores in the game carries over in the application to other problems than those of the game.

RELAY RACE

A good game to teach counting by 1, 2, 5, 10 or any number desired.

Make two cylinders of cover paper, one red and one blue. Write on the board: Reds, Blues. Choose a captain for the Reds and one for the Blues, letting the captains choose the children for their lines from the groups playing the game. The captains also may record the scores.

Directly, or some distance in front of each line place two circles.



Place the red cylinder in A, and the blue cylinder in C. At a given signal the captains rush forward and move the cylinders to B and D. As they run to the back of the line they touch the hands of the children next in line. These two run forward and move the cylinders back to A and B. *They* touch the hands of the next ones in the line who run forward and change the cylinders. This continues until the last child in one of the rows has moved the cylinder and is back at the end of the line. The

winning side may score 1, 2, 5 or any number desired by the teacher. Begin first with scoring 1. The number of races to be made should be determined by the teacher before starting the game. Ten or twelve is a good number. Children tell which side wins and how much ahead they are.

Game of Bean Bags

Aim:

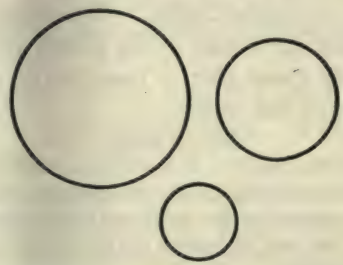
To teach any addition combinations desired. To give children power to add any combination.

A. K.	E. S.		
9	11		

Before beginning the game the teacher draws diagram like the above for recording scores.

Have three bean bags. Draw three circles of different sizes on floor. The bean bag thrown into the smallest circle, will count the most. A simple way to begin is with 1, 2 and 3 increasing the difficulty of the combinations as children show ability.

Each child throws the three bags at a turn. One or two turns may be given as time allows. One is enough. Children tell who is the winner. Later on, sides may be chosen if desired. This gives a good problem in adding—to add the total score of each side.



Game of Ring the Bells (To teach any addition combination desired)

Use a large square box. Fasten a string (use a heavy cord), of small bells across the center. The object of the game is to throw bean bags into the box without ringing the bells. This may count six. If the bag goes into the box but rings the bells this counts *three*. A bag outside the box scores nothing. Any other number may be substituted according to ability of group. It is well to use the same numbers in successive games for quite a while.

Children record their own scores and name winners of the game.

Game of Tenpins

To teach adding by 1, 2, 5 or any number desired. To teach tables if desirable. (Tenpins with balls may be purchased for ten cents.)

Arrange tenpins on the floor in an equilateral triangle. Children roll three balls trying to knock down as many pins as possible. Each pin knocked down to count as many points as the teacher may desire.

Game to Teach More and Less

From a pile of corn, say fifteen grains, the child who is "It" selects any number of grains he desires and the class guesses the number. If a child guesses seven, for in-

stance, "It" answers: "I have *more* than seven or *less* than seven," as the case may be. As each guess is made the child responds with *more* or *less*. The one guessing correctly, now is "It."

Guess How Many

This game is for quick sensing of number groups.

Have on your desk a number of wooden disks or cubes, or small objects made of clay, cubes, apples, or small cylindrical shaped boxes. Arrange in groups.



Divide the class into two sections with a captain for each section. Have each child of one section come to the desk, close eyes and pick up in one hand a group of objects; guess the number. If the guess is correct he may give the cubes to the captain of his side.

The children of the other section then must try to get as many cubes as possible. Then have the captain of each section hold up each cube while all the other children count in concert the number his side has won. The side having the greater number wins.

Do not allow a child to count the objects he picks up by ones. He must use one hand only. He will probably not be able to recognize by touch more than five.

How Many Moved

If this game is used in teaching the number four, have four children stand in a row at the front of the classroom. Ask, "How many children are going to play this game?" "Well, you are going to play, too." Then have those at desks shut their eyes, until the word "Ready" is called. Have the children in the group move to other places in the room in order to get such comments as the following as soon as the eyes are opened.

"Two children moved to the bookcase and two to the door. Four children are playing the game." The two and two return to form the row again while this is being said in order to prove the statement. Eyes shut again. "Three children moved to the blackboard and one to the window. Four children are playing the game." Eyes shut again. "One child moved to the cupboard, one to the door, one to the blackboard, and one to a desk. Four children are playing the game."

For the subtraction facts of four, have a group of four children. Have them take turns in hiding, to teach 4—3, 4—2, 4—1. "Four children were in the row, one is there now, three children are hiding." This reply should be given by a child as soon as all eyes are opened. If he replies quickly and correctly he should be allowed the fun of finding those hidden.

Playing Store

Say to the children, "I am going to play mother. Billy and Helen may be my children. I am going to the store and I'll spend all the pennies in my purse for you."

"George may be the storekeeper." Give George a number of little toys cut out of cardboard, or drawn on cardboard, also some candies made of clay. Have him place his stock along the blackboard ledge.

Begin taking money out of your purse, asking the children at desks, "Is this for my children?" "No, it's not a penny, it's a quarter." And, as other pieces of money are shown, "No, it's not a penny, it's a dime." "No, it's not a penny, it's a nickel." "No, that's not a penny, it's a fifty-cent piece." "No, that's not a penny, it's a dollar bill."

Then take out a penny each time until you have taken out the six in the purse, having all the children count as you do it. "How many pennies have I to spend for my children?"

"What shall I buy for you, Helen?" "And for you, Billy?" Go to the storekeeper and buy, spending three cents for one purchase and three cents for the other to get the combination three and three are six. "Who can count up the money I spent? If you know how to count the money, you can be the mother, or the storekeeper." Do the same with four cents and two cents, five cents and one cent.

Then choose one who has been a good counter for the mother, and one for the storekeeper, and two for the children, and play again.

ADDING AND SCORING

Aim: to cultivate skill in calculation. Place upon the board the following numbers:

9	7	
6	4	2
8	5	
0	1	3

Let there be three rows of children with an equal number of children in each row. Teacher points to a number on the board. Call on first child in first row to give the other number necessary to make ten. As, for example, the leader points to 8, the child should say 2. If the leader points to 7 the child should say 3. This child is given three different numbers—as above. If all three are answered correctly, he makes a score of 3 for his row, if he misses one of them he scores 2 for his row. Then the child in second row answers, and so on until each child has a chance. A child from each row is chosen to keep score for his row at board: as

First Row	*Second Row*	*Third Row*
3	2	3
1	3	0
2	1	3
1	2	2
2	2	3
3	3	3
—	—	—
12	13	14

The row making the highest score wins the game.

The First Lessons in Number of a formal nature have an underlying thread or plan which emphasizes a rational beginning in some real, tangible, experiences. An opportunity is given for free play through which a need for some essential number facts is felt. Directed, organized work along definite lines is presented at first with things, later without them, but always in a play spirit by which the children come to recognize the adult point of view as a help rather than something imposed upon them. An appeal is made to the child's interest in drills through numerous games. Groups of problems related to the daily activities of community life familiar to the child are presented.

The plan of procedure is as follows:

I. Experience:

a. Play, work.

b. Counting.

II. Study of a number whole:

a. Free-play; discovery of certain number facts by child.

b. Directed work; organized by teacher.

c. Application.

III. Development and drill upon particular number facts related to the number whole:

a. One or more number facts.

b. Application.

IV. Games:

V. Drills in addition, subtraction, multiplication, division.

VI. Miscellaneous tests.

THE STUDY OF THE NUMBER "4"

I. Experience

The children have counted the edges and corners of the paper they use, they have folded a window with its four panes and told imaginative stories of happenings as viewed from their windows or they have made a seed box. This may be used as a starting point for the formal study of "4" that is to follow.

II. Study of Number Whole

1. Free-play:

Use squares, sticks, or seeds. Let children discover what makes 4. Each child tells what he has found and continues until all facts have been experienced.

2. Directed work:

Equal groupings or rhythmical work, as follows:

Study of four: 2 and 2; 1 and 2 and 1.

1. Give each child four one-inch square tablets. Lay the tablets edge to edge in a horizontal row on your desk. What does it make you think of?

2. How many chocolates have you? Each one is how long? How many inches long is your whole chocolate piece?

3. Move two squares to the right one inch. ———— squares are at the right. ———— squares are at the left.

4. Two squares and ———— squares are four squares.

5. Change the position of the tablets from horizontal to vertical; back to horizontal.

6. Move two squares to the left. You have one-half of the squares to the left, what part of the squares have you at the right?

7. One-half of four is ————?

8. Put one-half in your right hand; one-half in your left hand.

9. Place the two halves on the desk in the same position.

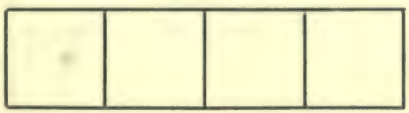
10. Touch the square at the right, and the square at the left, move out one inch. How many are left in the middle? Read the squares as one, two and one are four.

Seatwork. Illustrative work using lentils or sticks.

Unequal groupings:

Study of four: 1 and 3.

1. Give each child four sticks. Place in a vertical pile. Play they are sticks of candy. Place



4 four

in a horizontal pile. What are they now?

2. Move one stick to the right one inch. How many are left in the pile? One and three are ———— sticks. Always move the material back to its first position.

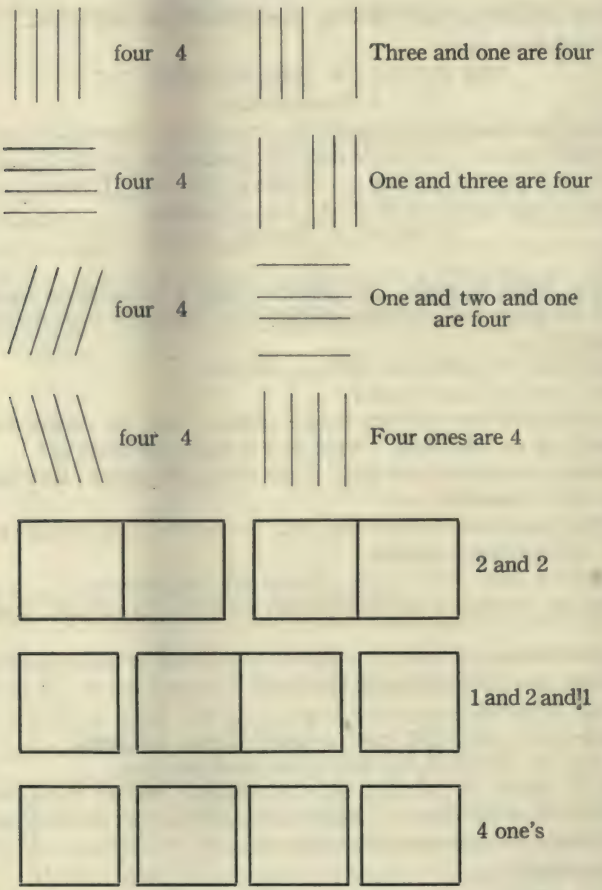
3. Three and one are ———— sticks.

4. Move one stick two inches to the right, one stick two inches to the left. Read. One and two and one are ———— sticks.

5. Two and how many ones are four?

6. Separate the sticks in center—one inch apart. How many ones do you see? Four ones are ———— sticks.

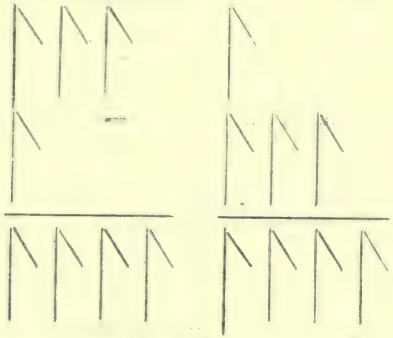
Seatwork: Lentils or sticks.



III. Development and Drill Upon Particular Number Facts Related to Number Whole

1. Present number fact, as 1 and 3 using as many mediums as possible; material, pictorial, and conventional symbols.

2. Indicate results on blackboard to be copied as seatwork by children using sticks, lentils, and written record.



Add		Subtract	
1	3	4	4
3	1	1	3
—	—	—	—

Three and one are————
One and three are————

IV. APPLICATION

N. B.—Let the work be objective and oral.

a. Practical problems:—

1. Mary bought a candy cane for 1c and a chocolate egg for 3c. She paid —c for all.

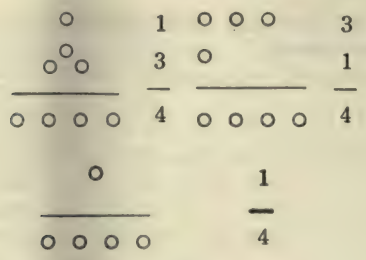
2. John is 3 feet tall. Frank, his elder brother, is 1 foot taller. How tall is Frank?

3. In playing the game of "Chickens," Mary picked up 4 grains of corn and Frank picked up 3 grains of corn. How many more grains did Mary pick up than Frank?

b. Quarters of a dollar.

Use toy money or circles. Let children make toy money.





1. In a dollar there are four (4) quarters.
2. In a half-dollar how many quarters are there?
3. If you have 4 quarters and give 2 of them for a book, what does the book cost?
4. Nell has 4 quarters. She will spend ½ of her money for a doll. What will the doll cost her?
5. Two quarters and two quarters are ———— quarters.

2 quarters	50 cents
2	50
4 quarters	100 cents
	25 cents
½ (4 quarters) =	25
	25
2 quarters	25
	100 cents

6. Frank has a quarter. Mary has two quarters and Fred has one. How many quarters have they all together? How much money is that?
7. I have four quarters. I will buy a handkerchief for 25 cents. How many quarters will I have left?

c. Seatwork of a similar character as a and b.

V. Games

a. Adding game.

1. Make cards 2" x 7" of manila cardboard. Write on each a combination of four and use as follows:
2. Teacher shows a card. The first child telling the sum correctly receives the card. The one who receives the most cards may be the teacher.

b. Matching game.

2	2	1	3	4
2	1	2	1	0
	1	1		

1. Each pupil takes a card after the cards have been flashed to the class. A child with two numbers on his card runs to the front of the room and shows it to the class.
2. The child holding the pictorial illustration or the words runs and stands beside the first pupil.

Grouping game.

1. Each child makes a domino card with manila cardboard, using brown or black crayola to make the dots.
2. A child shows to the class a domino and asks how many. The one guessing may show his card.
3. Each child has a set of domino cards for four—the teacher may place upon the board as follows. and any child having the card may rise.

```
 2    2+2=    two and two
 2
 -
```

VI. Table Drills

1. Add

```
 1  1  1  1
 1  2  3  4
 -  -  -  -
```

2. Subtract

```
 4  4  4  4  4
 1  2  3  4  0
 -  -  -  -  -
```

3. Multiply

(0 0) (two one's) (2 1's) 1 ×2 —

(00 00) (two two's) (2 2's) 2 ×2 —

One and three are ————.
Four less two are ————.
Two twos are ————.
Three and ———— are four.
How many twos in four?
Four divided by two is ————.
One-half of four is ————.
One-half of 4 apples is ———— apples.
3 cherries and 1 cherry are ———— cherries.
What will 2 guns cost at 2 cents each?

```
    0  one one          1     1     1     1     1
  0 0  two one's       ×1    ×2    ×3    ×4    ×5
0 0 0  three one's      —     —     —     —     —
0 0 0 0  four one's           1×1=  3×1=
0 0 0 0 0  five one's         2×1=  4×1=
                              5×1=
```

Divide.

```
   00   2 ⌈2⌉
00 00   2 ⌈4⌉
 0 0    1 ⌈2⌉
00 00   2 ⌈2⌉
000  0  3 ⌈4⌉
```

VII. MISCELLANEOUS WORK GIVEN AS A TEST ONLY, AS

1	4	2	3		
3	—2	×2	?	$2\overline{)4}$	$3\overline{)4}$
—	—	—	—		
			4		

$\frac{1}{2}$ of 4 = $2 \times 2 =$

2 = What part of 4?

2 + 2 = How many 4's?

How many 2's = 4?

SECOND GRADE

The object of the work of the first and second grades is to aid the pupils to image the objects and groups of objects in proper number relations; to make clear and definite quantitative imagery. This is accomplished in some measure by the incidental, informal work of the first grade since through the games, drawing, construction work, and out-of-school experiences some ideas of counting, of adding, and subtracting, together with simple estimates and comparisons are gained. These vague number concepts and number terms furnish the basis for more formal work in the second grade. The plan of procedure is fundamentally the same as far as utilizing the play spirit, and providing motive are concerned, but more attention is paid to drill by which to attain automatic memory results.

While all phases of number relation will be presented through objects in the analytic study of a number, the leading topic for the second grade will be addition with its inverse case, or subtraction. Counting will emphasize the relation of a number to a series, and the series idea is the basis of the number concept. Each number is recognized as occupying a certain place in the number scale, and should be committed to memory.

Objects should be used freely in all initial work, but should be continued only so long as necessary. When they get in the way of the child's thinking, of his securing memory results, then they are useless.

Oral and written addition and subtraction drills are given, and written work is placed on the board. From counting and analysis of number the children learn certain facts of the multiplication tables, while the inverse cases of these introduce them to division. With objects they find halves and fourths. In this way they learn the relation of pint to quart, quart to gallon, inch to foot, foot to yard. Telling time furnishes opportunity for teaching Roman numerals I to XII; number games call for higher numbers, and often, more difficult operations, and should not be withheld, therefore "carrying" in addition toward the end of the second half year is advisable.

Written work should be minimized, much of it being done under the supervision of the teacher. This necessitates blackboard work. Oral work should be distributed as follows: one-fourth of all time on counting, reading, and writing numbers; one-fourth on addition combinations; one-half of all the time given to analysis and synthesis of number work, with the corresponding applications to every day experiences. As nearly as possible all lines of work are carried along together. There is no necessity for limiting the number to 100 as long as pupils are not confused. An idea back of the number presented makes it tangible to the child. The work includes counting, grouping, measuring, reading, and writing of numbers, acquaintance with units of measurement needed in various kinds of handwork in the various school and home activities. Games, drills, and memorizing should be used extensively but always kept within the pupil's grasp.

REFERENCE BOOKS: Harris and Waldo, *First Journeys in Numberland*; Smith; *Primary Arithmetic*: Myers, *Primary Arithmetic*; Smith, *Arithmetic Games*; Johnson, *Education by Plays and Games;* Thorndike, *Arithmetic Series, Books I, II, III.*

Time allotment: Recitation, 15 minutes per day or 75 minutes per week. Oral work in the main, but occasionally tested by written record of abstract combinations. Seatwork, 15 minutes per day, or 75 minutes per week. Total, 150 minutes per week.

FIRST HALF YEAR

While 100 is indicated as the limit for counting, reading, and writing numbers, there is no reason for keeping within this limit as long as the pupils are not confused.

1. *Counting.* Limit to 100.

Count and write by 1's to 50, and backward by 1's from 50; by tens to 100, beginning with 0, 1, 2, 3.

By 5's to 50, beginning with 1, 2, 3.

By 2's to 20, beginning with 1, 2, 3; in preparation for addition and multiplication tables.

Applications:

Count schoolroom materials; pencils, books, erasers, crayons, by 1's; 5's. Number of children by 2's as in marching by 2's; children in attendance by 2's, absence, tardiness, age, size, weight, etc. In nature-study count number of seeds, parts of flowers, legs or wings of animals. Build up number series through the use of inch cubes, sticks, square tablets. Use card games for drill.

2. Development of number relations:

2, 4, 6, 8, 10, 12; 7, 14; 9, 18; 12, 24; 16, 32; 25, 50.

Plan of procedure:

a. Rational out-of-school experience as starting point: play, work.
b. Free-play—discoveries made by child of a number fact.
c. Directed work under guidance of teacher—
   (1) Equal groupings.
   (2) Unequal groupings.

d. Applications to real problems—including measures, and other every day experiences.

e. Development and drill upon one or more particular number facts in relation to the number whole.

f. Addition, and subtraction stressed in written work, though multiplication and division and part-taking are maintained in oral work.

g. Games. Table drills—which eventually lead to the completion of the 25 addition combinations where a sum does not exceed 10, and the 45 easy subtraction combinations.

Lesson Plan: See "Study of 4" in previous grade for suggestive treatment of a number. (P. 269.)

3. Addition. Teach the children to add 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, to any figure not exceeding 10. The 25 combinations should be made strictly automatic through memory work, allowing no counting after first experience with things. It grows out of counting, but is quite different from counting. It is the memorized results of experience and must be mastered purely thorugh memory work. If a child hesitates, give the result. Adding must become automatic memory work, and teachers must test pupils on the combinations that pupils have committed to memory. The 25 combinations to be taught in the grades are these:

1	2	3	4	5	6	7	8	9
1	1	1	1	1	1	1	1	1

	2	3	4	5	6	7	8
	2	2	2	2	2	2	2

3	4	5	6	7			4	5	6		5
3	3	3	3	3			4	4	4		5
											–

Drill: (1) Recall combinations, with objects, and written results.

(2) Recall combinations without objects or story; cards, games.

(3) Time tests.

(4) Problems, as

1	21	421
2	14	256
4	22	—
2	11	
–	—	

(5) Applied problems—involving the same combinations.

Caution—Keep within the memorized result.

(6) Use each combination taught in problems similar to the following, until automatic control is secured: e. g. 3 and 5 are what?

3	13	23
5	15	13
–	—	22
		—

(7) In the written work no "carrying" should be involved until late in the year.

4. Subtraction.

The following discussion is taken from Howell: *The Psychology and Pedagogy of Arithmetic*, (Macmillan) and receives the endorsement of leading thinkers and mathematicians:

1. Subtraction is harder than adding, ... associations backward are weaker than for the same distances forward, decreasing in strength as the distance between members increases.

2. While subtraction is still in the primitive stage certain subtractions are by preference performed directly, instead of additively.

The point of importance in connection with it, is the different methods that may be employed. What method is most economical and least liable to error? Such a question is best approached by studies in objective efficiency. Nevertheless, results so obtained would still await explanation, and any light from psychological experimentation may be welcomed.

The so-called Austrian method (by addition) is ruled out by considerations previously presented. This narrows the available methods of two, the prevalent one of borrowing one, when necessary, from the preceding minuend figure; and another in which one under like necessity, is added to the subtrahend. The psychology of the matter hinges upon the number of points of attention required in obtaining a given figure of the remainder; the fewer the points, the less time required and the less ability to error.

In the common method of borrowing from the minuend, when the minuend figure is smaller than the subtrahend, one is taken from the preceding minuend figure and imaged along with the minuend figure to be used. By analysis of the further process into steps this taking of the one is seen to be separated from the next minuend figure by four points: (a) the resulting figure of the remainder, (b) the recognition of the next figure of the subtrahend, (c) the recognition of the relative size of this figure and the corresponding figure of the minuend figure (to be reduced).

In the method of adding one to the subtrahend, the habit is to image the upper figure at once as a teen, then between this and the increasing of the figure of the subtrahend, which is the final point of attention in the process, only one point intervenes, viz., the recognition of the result. Hence, it is concluded, and it would seem upon good grounds, that the latter method is the better.

Problems in making change as called for at the store should be emphasized. Play store games frequently and fix the habit in a natural situation.

The 45 substraction combinations are the same as the addition combinations, and each should be memorized after being presented in its right relation in the study of a number whole. Ex: 9 less 5 equals?

1	2	3	4	5	6	7	8	9
1	1	1	1	1	1	1	1	1
	3	4	5	6	7	8	9	
	3	3	3	3	3	3	3	

4	5	6	7	8	9		5	6	7	8	9
4	4	4	4	4	4		5	5	5	5	5
	2	3	4	5	6	7	8	9			
	2	2	2	2	2	2	2	2			
6	7	8	9		7	8	9		8	9			9
6	6	6	6		7	7	7		8	8			9

Drill: (as in addition).

(1) Recall combinations, with objects and written results.

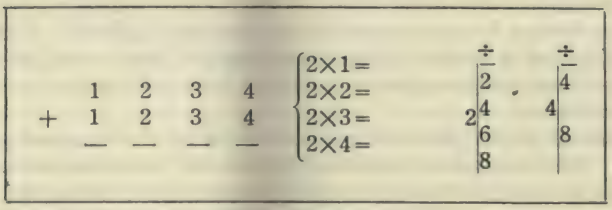
(2) Recall combinations, without objects. Use cards, games.

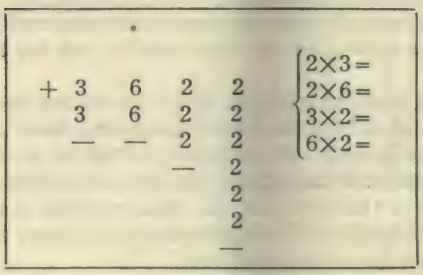
(3) Time tests.

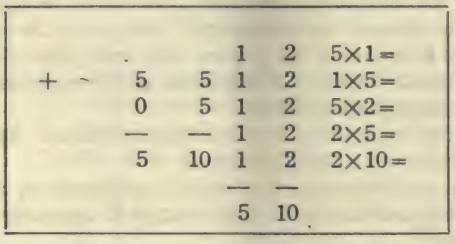
(4) Examples for sight drill, as

7	17	27
3	3	3
—	—	—

(5) Problems involving the same combinations.

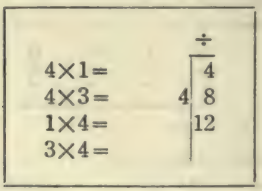






5. Multiplication.

Through the study of number wholes such multiplication and division facts as the following are presented and fixed, in parts of tables made repeatedly by the children.



6. Division.

The inverse cases of the above tables, together with exercises in finding halves and fourths of numbers as the complementary facts of multiplication,—are to be taught.

÷		
5|10	$5\overline{)5}$ $5\overline{)10}$ $5\overline{)20}$	$\frac{1}{5}$ of 5 = $\frac{1}{5}$ of 10 = $\frac{1}{5}$ of 20 =

7. Fractions.

Use and write fractions as needed in the applied problems, games, and objective seatwork. Let the meaning come from the objective seatwork. Use freely in part-taking as another form of expressing partition or division. Teach children to use the fractional form in expressing division in simple applied problems: 1/2, 2/2; 1/4, 2/4, 3/4, 4/4; 1/3, 2/3, 3/3.

8. Measures.

As need for these arise in actual practice, teach the units of measure; the quarter, the half dollar, dime and nickel; foot, yard, pint, quart, gallon; how to tell time by the clock; how to write the current date; how to write a house number; the dozen, and half dozen.

9. Symbols.

Teach the signs of addition, subtraction, multiplication, division, but put little stress upon them. Use the symbol only when confusion might arise without it. Do not use word and symbol. Familiarize the child with the column form. Teach the writing of numbers to three places. Write the house number. Roman numerals of clock face to XII. Emphasize the correct form.

10. Problems.

a. School activities—materials and their cost: scores in games, etc.

b. Out-of-school activities; toys, fruits, vegetables, used in buying and selling; playing store; car rides.

c. Original problems by children involving the new number relations.

d. Problems without figures. Teach children to *read* arithmetic.

11. Games.

a. Drill: card games: toy money, target, bean bag, domino.

b. Ring games in which scores are kept.

c. Thinking games.

SECOND HALF YEAR

1. Counting. Limit to 200.

Count and write by 2's to 50, 100; 5's, 10's to 100 forward and backward; by 4's to 48; 3's, 6's to 36; to 72; count by units of measure. Translation exercises, e. g.:

2 pints equal 1 quart.

3 pints equal 1 quart and 1 pint.

4 pints equal 2 quarts.

2. Development of number relations.

Observe the following order: 12, 24, 36; 24, 48; 30, 60; 50, 100.

Plan of procedure:

a. Rational out-of-school experience as starting point.

b. Free play discoveries made by child of the number facts within the number.

c. Directed work under the guidance of the teacher:

(1) Equal groupings.

(2) Unequal groupings.

d. Applications to real problems, including measures and the every day experiences.

e. Development and drill upon one or more particular number facts in relation to the number whole.

f. Table drills which eventually lead *to the completion of the 25 addition combinations* where the sum does not exceed 10, and the 45 easy subtraction combinations.

g. Games.

3. Addition.

Continue drill upon the 25 addition combinations to secure automatic response.

Drill in increasing and diminishing a series of numbers ending with the same digit, by any number of one figure.

6	16	26	36	36	26	16	6
9	9	9	9	9	9	9	9
—	—	—	—	—	—	—	—

Addition groups, carried to "9+9" as in the following:—

(a)

3	4	3	2	6	0
2	5	9	2	4	4
5	9	12	4	10	4

and their reverse

4	2	9	5	2	4
6	2	3	4	3	0
10	4	12	9	5	4

(b)

3	4	3	2	2
6	9	3	6	8
9	13	6	8	10

and their reverse

6	8	3	9	6
2	2	3	4	3
8	10	6	13	9

(c)

2	8	4	5	7
4	6	4	8	3
6	14	8	13	10

and their reverse

3	8	4	6	4
7	5	4	8	2
10	13	8	14	6

In the teaching of each group of combinations, the following steps are taken and always in the same order:

Step A. Memorize perfectly the combinations as they stand above in both oral and written form. Give drill in pointing to the figures as they stand; move from right to left, and vice versa; from top to bottom. Erase the sums, continue the exercise as before. If the slightest hesitation appears, rewrite the sums. Drill until the pupil can readily give the sums at sight; also accompany these exercises with a thorough drill on the oral form.

Step B. Use the several combinations in the different decades of the number scale, as the 60's, 70's, by prefixing the tens. Children need to have drill in the upper portion of the scale as well as the first part.

Step C. Use each combination mastered in building columns; at first, two addends, increasing to four or more in single columns and three and four in double columns. Keep within the combinations of the groups. Carrying. Recognition of tens.

Illustration	4	4	14	12	24
	5	5	15	12	23
	–	0	—	15	12
		—		—	—

4. Subtraction.

Making change, as previously indicated. Secure automatic memory results through motivated work and drills.

5. Multiplication.

Continue the presentation of multiplication to show that it is a short method of addition and a great economy. Let children show the addition form as well as the multiplication, as

4	4	3	3
4	×3	3	×4
4	—	3	—
—	12	3	12
12		—	12
		12	

Write the multiplication facts learned in the tables given according to various directions, e. g., equal groupings, unequal groupings, the difficult combinations.

Tables: 2's, 5's, 10's and 3's made and memorized.

6. Division. Reverse of multiplication. Vary the language terms.

7. Fractions. Part-taking with 1/2, 1/3, 1/4, 1/5 of numbers from 1 to 50.

8. Measures.

Continue the use of measures already presented: week, month, day; clock face: quarter-hour, half-hour; quart, peck, bushel.

9. Symbols.

The digits, + —, ×, ÷, = $, c.

Roman numerals, I to XII.

10. Problems.

a. Out-of-school activities: buying and selling, distributing, giving, gathering, simple bills. Other centres of childish interest—toys, Christmas tree, milkman, car fares, orchard, market, garden, flag day.

b. Original problems by children.

c. Problems without figures. Teach children to *read* arithmetic. Actual operation with objects when necessary; much blackboard work under direct supervision of the teacher. Simple expression of written problems, coupled with oral statement.

11. Games.

a. Drill cards for 25 combinations.

b. Drill cards for multiplication tables, 2's, to 24; 3's to 36; 4's to 48; 5's to 60; 6's to 60.

c. Bean bag, ring toss, target, etc., calling for scores to use in addition, subtraction.

d. Playing store, selling toys, candies, fruits, vegetables.

e. "I am thinking of something." Circle games.

THIRD GRADE

Society demands ability to count; to read, and to write numbers; accuracy and rapidity in the four fundamental processes operating in integers and fractions; simple exercises in the application of these processes to the real problems of life; and a knowledge of the tables of measurements which are in common use. Whatever is given in the primary grades should emphasize these essentials and place them within the grasp of the child's ability.

The work of the second grade aims to familiarize the child with the relation of numbers in a series through much rhythmical counting. The twenty-five addition facts are mastered as pure memory work, and many multiplication facts gained through counting and experience with materials are made familiar to the child though not necessarily memorized by him.

Material. The third year's work begins with a review of the previous work, and much is still to be accomplished. The multiplication tables are to be completed and memorized, the addition and subtraction facts are repeated and extended until mastery produces automatic recall. Application of the simple arithmetical facts and the fundamental processes in simple *one-step problems* related to rational interests are presented in both oral and written work.

Method. The *language* of arithmetic should receive consideration through the frequent presentation of problems without figures, through attention to the statement of a problem on the part of both teacher and children, and to the *reading* of arithmetic with the intention of discussing the process involved. Avoid confusion of ideas; see that the children thoroughly understand the problem and the process before beginning to solve. Do not reduce the work to mere form, but keep it within the comprehension of the children. Additional aids to clearness are found in blackboard illustrations, in the use of concrete materials, in taking a similar simple problem with small numbers. In the beginning all concrete problems should involve only one of the processes and the same

kind of problems should be continued until the *form* is thoroughly fixed. Much stress is placed on concrete oral work, as well as on abstract drills. While the reasoning and application phases of the work are constantly kept developing there is no neglect of opportunity to develop habituation in the use of number facts and processes.

Summaries and reviews are frequent, recurring at regular intervals. The Courtis Standard Tests in Fundamentals will be given three times a year, and graphs made to help each child to know his own rating. The work if kept within the grasp of the child's ability will result in accurate individual work. Always teach slowly, and carefully, the process first, then drill. Do not teach by *drill. Teach first,* then drill, and the more effective the teaching the less need of drill. Both teacher and children should keep a record in a note book of the difficulties which arise, and consciously work toward their eradication.

Small groups of children should be organized at intervals for special help, but in the usual recitation, the teacher should aim to hold the attention of the whole group by good teaching. To this end the outline which follows provides for systematic teaching and drill in the processes—a drill which must be continued beyond the primary grades, if the desired standard of accuracy and rapidity be secured.

Oral Work. At least three-fourths of the time should be devoted to lively, snappy drill in both abstract and concrete problems.

Written Work. One-fourth of the time should be devoted to written work.

Time allotment: Recitation, 20 minutes per day or 100 minutes per week. Seatwork, 20 minutes per day, or 100 minutes per week. Total, 200 minutes per week.

I. Integers.

1. Counting; 5's, 10's; 4's; 3's, 6's; 7's, 9's; forward, and backward from 100.
2. Notation and numeration: Reading, writing numbers of three, four, five orders. Roman numerals to L.
3. Fundamental operations.
   Addition: Limit to numbers of three and four orders.
   Subtraction: Limit to numbers of three orders.
   Multiplication: By one; later by two figures.
   Division. short, four orders by one digit, by 10, 11, 12.

II. Fractions:

1. Part-taking tables in multiplication and division.
2. Equivalents: 1/2, 2/4, 3/6, 4/8, 5/10.
3. Addition and subtraction: Simplest fractions in oral work, using illustrative material.
4. Decimal point in writing dollars and cents, without explanation. Correct use of *and* to indicate the decimal point.

III. Measurement:

U. S. money.
Liquid and dry measure.
Linear measure: inch, foot, yard.
Time: minute, hour. day, month, year.
Weight: ounces, pound, hundredweight.
Abbreviations: in. ft. yd.; oz. lb. cwt ; doz.; qt. pt.; gal.; pk. bu.

IV. Applied problems:

1. Industrial.
2. Original problems by teacher and children.
3. Problems without figures.

V. Games:

1. Playing store.
2. Scoring.
3. Time tests.
4. Class contests.

REFERENCES: Belfield and Brooks, *The Rational Arithmetic;* Myers, *Arithmetic,* Book I, Part II· Smith, *Primary Arithmetic;* Smith, *The Teaching of Arithmetic;* Thorndike, *Arithmetic Series, Books I, II, III.*

FIRST HALF YEAR

Leading topics: The four fundamental processes with emphasis upon addition and subtraction. Multiplication tables. Review and drill upon the twenty-five addition number facts. Add the other twenty-five addition facts

One-step problems.

Courtis Standard Tests: October, January, June.

Courtis Practice Tests.

September and October: Leading topic: Addition.

I. Integers:

1. Review of work done in preceding grade. This may require from four to six weeks. Regularly appointed weekly and monthly reviews—using Courtis Practice Tests and the number combination drills. Three-fourths of each period should be given to oral work.

2. Counting: 5's 10's, 2's, 4's, 3's, 6's.

3. Notation and numeration.

a. Symbols: Reading, writing, and copying units, tens, hundreds, and later thousands. Use of comma; omission of *and.*

b. Roman numerals: Clock face, chapters of books to XX.

4. Fundamental operations:

Addition.

1. Limit to numbers of three and four orders, and five addends; including dollars and cents.

2. Tables: Review the number combinations and their reverses. Memorize until automatic recall is assured. *Allow no counting.* When a child hesitates show the *sum.*

(a)

3	4		2	6
2	5		2	4

and their reverses

2	5	9	2	4
3	4	3	2	6

(b)

3	4	3	2	2
6	9	3	6	8

and their reverses

6	9	3	6	8
3	4	3	2	2

(c)

2	8	4	5	7
4	6	4	8	3

and their reverses

4	6	4	8	3
2	8	4	5	7

3. Make problems similar to the following which keep the combinations within memorized groups. Follow the order of difficulty as indicated below:

a. Single columns; for addends increasing in number as control is increased.

b. Columns of units and tens.

c. Columns of units, tens and hundreds.

d. Drill: Begin at bottom of column; at top of column; group addends. Dictate orally; use competition to add interest.

e. Review these combinations in applied problems. Much rapid drill on single column addition.

f. Recognition of tens. Repeating the unit in a series, as in rhythmic work. For oral and written applied problems, see Myers, and Smith.

Require each child to say "The sum is — — — — "

Illustrative Drill Lists:

Group a

3	13	23	9	19	2)	13	29	39
9	9	9	3	3	3	19	13	23
—	—	—	—	—	—	—	—	—

Group b.

1	2	3	4	6	8	30	43	1	132
3	9	3	9	9	3	3	9	41	236
9	3	9	3	3	9	9	13	163	310
–	–	–	–	–	–	3		29	433
						—	—	—	—

Group c.

4	14	33	63	0	1	3	5	7
3	3	4	4	4	4	4	4	3
—	—	—	—	3	3	3	3	4
				–	–	–	–	–

Group d.

4	24	43	64	40	304	8343
3	3	4	3	64	133	4404
0	4	4	24	43	440	5554
14	13	44	3	44	554	——
—	—	—	14	43	——	
			—	—		

Group e.

7	4	3
1	9	4
9	7	7
2	1	2
5	5	3
3	2	5
4	3	4
–	4	3
	–	4
		–

4. Time test. Courtis' Practice Test: Addition: Follow directions carefully. Any child falling below the standard score for Grade III needs special attention.

Multiplication:

Tables: 5's, 2's, 10's, 3's, 4's to 24; 1/2, 1/3, 2/4, 3/4, 1/5, 2/5, 1/10 of 60, of 100.

1. Making and memorizing of tables according to various criteria:
   a. Equal groupings, as 2 x 2, 2 x 4, 2 x 6, etc.
   b. Unequal groupings, as 3 x 3, 3 x 5, 3 x 7, etc.
   c. Recognition of tens, as 4 x 1, 4 x 10, 4 x 11, 4 x 2, etc.
   d. Illustrations, showing equations and comparisons with addition, as:

	9	10	12	7	6		9 =
3	9	10	12	7	6	3 x	10 =
	9	10	12	7	6		12 =
	—	—	—	—	—		7 =
	27	30	36	21	18		6 =

   e. Teach a few combinations at a time rather than a table at a time. Each combination and its inverse should be taught together, and division and fractional parts used freely, as:

Three 6's are 18.	18 ÷ 3 = 6
Six 3's are 18.	18 ÷ 6 = 3
1–3 of 18 = 6 =	1/6 of 18 = 3
6 is what part of 18?	

   f. Carry forward the work in division, so that it includes the numbers that do not give an integer answer; as,

18 ÷ 3 = 6 19 ÷ 3 = 6 and 1 rem.

   g. Mass the drill where it is most needed; as in 3's.

3 x 9 = 27 3 x 7 = 21

   h. Records should be kept by each pupil of his own difficult combinations, for reference, and future drill.

2. Factoring: Find through experiment the factors which produce a number, as

36 =	6 x 6	18 x 2	3 x 3 x 4
	4 x 9	2 x 18	6 x 3 x 2
	9 x 4	2 x 2 x 9	6 x 3 x 2

3. Application in oral problems:

REFERENCES: See Smith, *Primary Arithmetic*; Myers, *Arithmetic*, Book I; Belfield and Brooks, *Problems related to tables;* Thorndike, *Arithmetics, Books I, II, III.*

II. Fractions:

1. Part taking in tables of 2's.
2. Equivalents: 1/2, 2/4, 4/8, 3/6, 5/10. With concrete materials only.
3. Decimal point used in writing United States money. Correct use of *and.*

III. Measurement:

1. Liquid and dry measure. Use in application of tables of 2's, 4's. Weight: oz., lb.

2. United States money. Use amounts familiar to children.

3. Time. The clock face. Roman notation to XXV.

IV. Applied problems:

1. Industrial: Garden products; market sales; groceries; earnings; time; weight of children.

2. Original problems both oral and written, made and solved by the children. During these months special stress placed on *addition problems* which are real to the children, growing out of real situations. Smith gives you the method; Myers, and Belfield and Brooks give you problems with *content;* and the regular work should suggest others. Make them practical. The articles bought and sold should be articles known to pupils, articles that they will probably be buying. Have prices correct. Make price lists which contain accurate data,

3. Problems without figures; one-step problems only, to develop power to read arithmetic intelligently, and to reason clearly.

a. Place problems on the board for *reading* and discussion.

b. Read arithmetic. Borrow books occasionally from the grade above.

V. Games:

1. Scoring: as Ring Toss, Target, Bean Bag.
2. Time tests: Oral and written work on addition and multiplication tables.
3. Racing games with set time limits.
4. Playing store: Buying and selling garden products, groceries.
5. Playing time-keepers. In school, in a factory, on a trolley or train.
6. Toy money.

VI. Devices:

Use devices to keep work from growing monotonous.

1. Cards for drill on combinations. Cards containing problems, both abstract and concrete, for seatwork drills.

2. Charts for class use: Grocery list, presenting articles in common use with current prices. Flower market sales. Earnings—by the hour, by the day, by the week, or month, of workers in the community; weight of children; test weights obtained by actual measurement.

3. Cards: For individual use. Make cards, with a written problem on one side, and abstract drill work on the other. Use in competition work, letting a pupil keep a record of the number worked correctly in a month.

4. A horizontal line of numbers on board with one number written below to be added to each one above, or to be subtracted, or multiplied by. Use the square, circle, perpendicular line, and others. Change frequently.

5. Competitive tests by rows, by classes, in oral work or in written, at board or seat.

a. Devise team work, as three rows in class, indicate each row on board as A, B, C. Give a problem to the children in front seats. The one who answers correctly first scores one for his row. The next problem is given to the next three, and so on.

b. A class or row stands:—each child is given a problem in turn. When he answers correctly, he sits. Those who fail, remain standing and are given aid.

c. Time limit. A certain time for solution. Score the successes and failures.

d. The results obtained in oral work should often be recorded by pupils.

VII. Measuring Arithmetical Ability:

Courtis Standard Tests in simple combinations. Record in graphic form the class result and aim to bring children falling below the standard score up to standard by January.

NOVEMBER AND DECEMBER

Leading Topics: Addition and Subtraction.

I. Integers.

1 Counting 5's, 10's, 6's, 12's, 2's, 4's, 8's, 25's forward, and backward from 100.

2. Notation and numeration:
   a Symbols: Reading, writing, copying numbers involving thousands.
   b. Translation exercises: words and figures.

3. Fundamental operations.

Addition—continued.

a. Forty-five combinations.

(a)

2	6	5	7	5
5	7	3	8	5

and their reverses

(b)

5	7	3	8	5
2	6	5	7	5

Present these facts and the reverses in order given. Memorize. Make problems similar to the following which keep the combinations within the committed groups. Begin at the bottom to add. Illustrate drill list.

6	3	5	8	787	926
2	5	6	5	355	555
7	3	2	7	876	712
5	7	7	5	552	315
6	5	5	6	235	738
5	8	3	2	—	175
2	7	5	5		552
–	–	5	–		—
		–			

b. Drill upon the more difficult combinations, as

8	7
7	6
—	—
15	13

and use in drill tests until the combination is familiar. Emphasize recognition of this in rhythmical stories, in single column addition, both short and long, and in two and three columns of varying length. Courtis Practice Tests are also suggestive.

c. Continue drill upon the forty-five combinations. Give pupils opportunity to make drill lists involving a single combination; and also a single group.

Subtraction:

Limit to numbers of three orders.

Drills: Correlate addition and subtraction: Use subtrahend in asking how many makes the minuend; supply the missing number; rhythmical exercises, as

17	27	37
9	9	9
—	—	—

Observe the following steps in presentation: Study Smith's *Primary Arithmetic*, Recognition of units and tens, pp. 41, 52–84.

Sight. Recognition of units and tens, p. 41.

Written. Recognition of units and tens, pp. 43–59.

Repeating unit in a series; Rhythmical work. Development of process, pp. 84–85.

Order of difficulties: Subtrahend larger than minuend; one number in minuend larger than in subtrahend; zero in subtrahend.

Terms: Less, minus, difference. Require each child to say "The difference is."

Application of difficult combinations in abstract problems.

Time test: Use Courtis' Practice Tests,—Subtraction.

Multiplication:

Tables: 6's, 12's, 4's, 8's, to 80. Emphasize progression—as 6.2's, 6.20's, 6.200's; 6.2000's.

Part-taking: 1/6, 5/6; 1/4, 3/4, 1/8, 3/8 of 60, of 100.

Division tables reverse of multiplication. Drill on equal groupings, unequal groupings; recognition of tens, as:

$$4\overline{)8}\quad 2 \qquad 4\overline{)9}\quad 2 \text{ and } 1 \text{ over}$$

$$4\overline{)10}\quad 2 \text{ and } 2 \text{ over.}$$

III. Measurement:

1. Linear measurement: inch, foot, yard.
2. Dozen: working days in week, month; uses of six.
3. United States money, used within child's comprehension.

IV. Applied Problems:

1. Industrial: Christmas shopping, laundry bills; Christmas sales; school-room measurements; articles made, rugs, pillows, paper tape measures.
2. Original problems made by the children.
3. Problems without figures. (See previous suggestions.)

V. Games:

Emphasize multiplication tables and addition combinations through card and blackboard drills. Invent devices to stimulate interest.

1. Toy shop: Buying and selling.
2. Christmas sales: Use paper articles, pictures, and real objects brought from home.
3. Ring games; as: one pupil in center is given a number, as 8. Pointing to a child to begin the table of 8's, he watches for a chance to slip into the ring when an error is made. The vacant place is taken by the one who failed.
4. Double ring. A time test: Two sets of children chosen to give combinations of 8, including reverses, division and part-taking. The set completing combinations correctly in shortest time, wins.
5. Racing game at blackboard. Drill on tables, in addition, in subtraction.
6. "I am thinking of a number in the table of 6's."

REFERENCES: Belfield and Brooks, pp. 45, 57, 105; Myers, pp. 40–44; 45–47; Smith, p. 29; Thorndike, *Arithmetics, Books I, II, III.*

VI. Devices:

Use charts and cards freely as a stimulus to effort. Apply addition and subtraction in simple written problems involving children's affairs and interests. Review the other fundamental processes, multiplication and division, in oral work mainly.

Let the problems be children's problems, not adult problems. A child's interest in formal work is real; but it is short-lived. Problems must have content; therefore connect them with everyday affairs. Keep the work concrete.

JANUARY AND FEBRUARY

Leading Topic—Multiplication

I. Integers:

1. Notation and numeration.

a. Symbols: Reading, writing, and copying numbers, including thousands. The year, and date.

b. Roman numerals to L.

2. Fundamental operations:

Addition and subtraction—continued.

a. Review the forty-five combinations. Present the following:

(a)

7	6	7	9	4
9	6	2	9	8

and their reverses

(b)

9	6	2	9	8
7	6	7	9	4

b. Apply in abstract and concrete problems as previously indicated. Work out a series of problems for drill, emphasizing:

Rhythmical series, and recognition games.

Single columns—short and long.

Units, tens and hundreds in columns, with three to five addends.

c. Give children opportunity to make both abstract and concrete problems based on the combinations and the groups of combinations.

Multiplication:

Tables: 7's, 8's.

Part-taking: 1/7, 1/8, 4/8, 5/8. Division: 7's, 8's.

Multiplication and division: At first, limit to one figure and the use of 10; later, numbers of two and three orders. Use the same multiplier until correct habits have become automatic.

Study carefully Smith's presentation of multiplication, p. 121.

Observe order of difficulty; first "carrying" zero in the multiplicand; later, two place multipliers, which are presented only when ease and accuracy have been attained with one multiplier.

Terms: Multiply, product. Require the pupil to say "The product is."

Use Courtis' Practice Test in multiplication for purposes of drill.

II. Fractions:

Concrete and oral work.

Part-taking tables in multiplication and division.

Equivalents, if occasion demands.

III. Measurements:

Time: Uses of seven.

Weight: ounce, pound, hundred weight.

Dry measure: quart, peck, bushel.

IV. Applied problems:

1. Industrial.

Dairy, shoe factory; weight of children. Time: school vacations. Wages for men, boys, women. Earning money.

2. Original problems made by children.

3. Problems without figures. (See previous suggestions.)

V. Games:

1. Scores for wage earners; outdoor sports, as running, jumping.

2. "I am thinking of a number."

Drills in multiplication.

3. Factoring.

VI. Devices:

1. Use of measures, when available. Use paper devices for showing relation of pint to quart, peck to bushel.

2. Make bags of varying weight, 1 lb., 1/2 lb., 1/4 lb., 1 oz.

3. Charts showing list of dairy products; wages of wage-earners in the neighborhood.

REFERENCES: Belfield and Brooks, *Primary Arithmetic;* Myers, *Arithmetic*, Book I; Smith, *Primary Arithmetic.*

VII. Measuring Arithmetical Ability:

1. Courtis Standard Tests for Addition, Subtraction, Multiplication and Division. Any child falling below the standard score of 26 for addition, of 19 for subtraction, of 15 for multiplication, of 16 for division, needs special attention at this time.

2. Divide class into groups based upon their needs, and give special help once a week and as opportunity offers in daily work. Devise team-work by which the more able may become drill masters of those needing special drill.

SECOND HALF YEAR

Leading Topics: The four fundamental processes with special emphasis upon multiplication and short division.

Multiplication tables mastered.

Forty-five combinations.

One-step problems.

Courtis' Standard Tests: June.

FEBRUARY

Continue work of January.

MARCH AND APRIL

Leading Topic: Division.

I. Integers: Fundamental Operations:

1. Addition and subtraction.

a. Time tests: securing accuracy, with speed.

b. Tables: 45 combinations; automatic recall.

c. Oral drill on combinations as previously indicated, extending the drill by use of tens and hundreds.

d. Emphasis will be placed upon the "borrowing and carrying" method in subtraction, as a part of the drill work on the forty-five combinations.

e. Extend the drill for oral and written work as previously indicated by making abstract and concrete problems based upon the combinations drilled upon.

f. Secure complete automatism by using various devices, and competitive tools to stimulate endeavor.

g. Terms: add, sum. Train pupil to say "The sum is."

(a)

7	3	5	9	9
7	4	7	2	1

and their reverses

(b)

7	4	7	2	1
7	3	5	9	9

2. Multiplication:

a. Multiplication by two figures in multiplier. Use numbers of two and three orders only.

b. Tables: 9's, 11's; part taking: 1/9, 3/9, 6/9, 1/11.

c. Time tests for accuracy and speed.

a. Terms of multiplication used correctly. Teach pupil to say "The product is."

3. Division: Short—continued until end of year.

a. Division by one figure only. Place quotient *above* the dividend.

Short division with 10, 11, 12. Limit quotient to numbers of four orders.

b. Read the quotient in terms of the divisor, and do oral work. e. g.:

$$\begin{array}{r} 957 \\ 5\ )\ 4735 \end{array} \quad 4735 \text{ equals} \begin{cases} 500 \\ 200 \\ 35 \end{cases}$$

c. Tables: made and memorized; part-taking.

d. Terms: divisor, dividend, quotient. Teach pupil to use terms correctly. Emphasize the habit of expressing division in fractional form whenever possible. Avoid awkward statements by fixing correct ones at the outset.

e. Time test: Courtis' Standard Tests. Addition, subtraction, multiplication and division. Note failures to attain the standard scores for third grade and give special attention to these cases.

II. Measurements:

Linear: Inch, foot, yard.

Dry and liquid measure.

Square: Compare square inch and square foot.

1. All this work must be kept concrete, based upon actual estimation and measurement. Use Speer blocks, cubes, paper, blackboard illustrations, and other material which children can observe and handle, and keep within the limit of ***simple, oral*** problems.

a. Make estimates of: lengths; height; distances; e. g., edge of book, of paper, of window pane, of window ledge; of walk in school yard. Measure to determine actual distances, etc.

b. Find perimeters of objects which pupils can see, handle, walk around, and measure with a tape or yard stick.

c. Make measures: foot, yard, sq. in., sq yd.

d. Children should cut the sq. in., sq. ft., sq. yd., from paper, and use in *covering surfaces.* The real, tangible experience in measuring lengths, heights, distances with tape, and the yard stick, and these very simple experiences extended to measuring *surface* by known units of measure, the square inch, the square yard, the square foot, will furnish an apperceptive basis for good work along these lines, without confusion.

e. It is essential that the work be kept simple, concrete, and within the pupil's range of experience.

III. Applied problems:

1. Industrial.

a. Garden measurements, products, wages, bills.

b. Telephone and telegraph: Cost of installation; messages, messenger service, time.

2. Original problems by children.

3. Problems without figures.

a. Children should show facility in changing abstract problems to concrete form; in making original problems; in reading problems, and reasoning in one-step oral problems. Keep work simple and concrete.

IV. Games:

1. Estimating lengths, heights of trees, height of classmates; distances; across the rooms, across the yard, a block.

2. Running and estimating distance; measuring the distance with yard stick.

3. Jumping: measuring in inches and yards.

4. Contesting teams to show skill acquired in mastery of the number combinations taught.

MAY AND JUNE

Leading Topic: Extension of the four fundamental processes within reasonable limits, securing automatic control.

I. Integers:

1. Notation and numeration of five orders.

a. Symbols: Reading, writing or copying numbers. Thousands, hundred thousands.

b. Roman notation to L.

c. Terms of notation: Use and spell:—units, tens, hundreds, thousands.

d. Translation exercises: Words to figures, etc.

2. Fundamental operations:

Addition, subtraction, multiplication and division.

Oral and written work in abstract and concrete problems.

a. Methods of proof should be presented.

b. Time tests for speed and accuracy. Use Courtis' Standard Tests for fundamentals.

c. Tables: Forty-five combinations reviewed and extended to tens, hundreds. Rhythmical work. *Review all multiplication tables,* using multiplication, division, and part-taking interchangeably.

II. Measurements:

United States money. Linear and square measure continued. Abbreviations of arithmetical terms: in., ft., sq. in., sq. ft.; gi., pt., qt., gal.; pk., bu.; oz., lb.; c., cts., $; bbl.; yr., mo., da., min., hr.

III. Applied Problems:

a. Industrial.

Cost of summer clothing; cost of summer trips; summer pleasures; refreshment stands; garden problems; construction work; simple bills.

b. Original problems: buying and selling.

c. Problems without figures.

IV. Games:

1. Time tests using various devices.
2. Class contests in oral and written work.
3. Interclass contests based on multiplication tables, the forty-five combinations, and problems without a pencil.

APRIL–JUNE

V. Measuring Arithmetical Ability:

1. Courtis' Standard Tests.

FOURTH GRADE

The work of the third grade aims to secure automatic memory recall of addition and multiplication facts and to familiarize the child with the fundamental processes; however, with the summer vacation intervening and the tendency to forget in forty days one-half of what is apparently well learned, reviews are not only important, but indispensable. Not only *reviewing* the work previously given but *re-learning* is necessary. Each child may well keep a record of the things forgotten, and thus the sooner succeed in effective recall and make progress. The important thing on the one hand is to review the *essential points of difficulty* and to avoid aimless rehearsal, and on the other to avoid encroaching upon the field of endeavor of succeeding grades. Three things should be kept constantly in mind: simplification, elimination, and the language of arithmetic.

Simplification leads to the use of rational one-step problems, to well-defined oral work which aids clear thinking, and to the avoidance of unwieldy numbers in abstract work. Elimination of ponderous numbers, even for practice, as in multiplication or long division is necessary; all work with fractions which does not deal with simple fractions and mixed numbers as needed in actual practice; square and cubic measure, except to present the unit idea of the inch, the foot, the yard, in surface and volume, through concrete work wholly oral and objective, should be avoided. The language of arithmetic should receive consideration in daily work with problems without figures, in the avoidance of complicated analyses or explanations and, on the other hand, an insistence upon a vocabulary which aids in a simple, clear statement when needed.

Standardization is essential. In attempting to secure uniformity of results tests should be given from time to time by which growth or retardation is indicated. The Courtis Standard Tests aim to measure arithmetical ability, and are given at stated intervals dur-

ing the year. Graphs should be made to help each pupil to know his own rating. Following the plan begun in third grade, teamwork should be encouraged by which the more skilled members of the class group become the drill masters of their less fortunate class members.

Material. The fourth grade work is but an extension of what has already been begun. Long division is the new feature of the work which is not presented until midyear, in order that multiplication be emphasized, and that short division be used wherever divisors are of one figure, or of one figure followed by ciphers. Counting is continued, variety being introduced by beginning with 1, 2, etc., to 10, and adding 2's, 3's, to 12's. The common weights and measures are formally set forth in tables and memorized.

Method. This is pre-eminently the grade for mechanical drill. Abstract problems are performed with evident interest, without regard to their concrete significance. Speed and accuracy in handling the mechanics of arithmetic in the four fundamental processes is the desired end. Pupils should be taught to check and prove all work. Check addition by adding the columns in reverse order. Check subtraction by adding subtrahend and difference together to give the minuend. Check multiplication by going over it carefully a second time. Check division by multiplying the quotient by divisor and adding the remainder, if any. The habit of checking and proving results should be established by practice.

Oral Work. The habit of estimating approximately, or evaluating a problem should also be established to avoid unreasonable results. Problems without figures are given to aid materially in developing the power to read arithmetic intelligently, and to reason, using in solution a simple form. Oral work takes precedence over written, written work being used only when numbers involved are too large, or relations too complicated to be carried accurately in the mind.

Each recitation time should provide for oral work the character of which may be one of the following phases: drills on tables, addition, multiplication, measures and their applications; problems without figures; work with small numbers, emphasizing one process in the solution of one-step problems until the *form* is fixed.

Require the simple statement of the result, except when you wish to test the process by which the result is obtained. Then a brief analysis should be given. The *record* of the result is sufficient in written "Oral work."

At least half of the time should be given to drills, both oral and written, to secure accurate estimation.

Written Work. Written work embodies the same points, mechanism and reasoning. Accuracy and speed in operation are secured only by abundant practice, and in reasoning by explaining why the mechanical work is performed as it is. Guard against written statements that may be untrue and a waste of time. By increasing their ability to handle numbers orally, train pupils to use paper and pencil less. In problems too difficult to solve orally, written expression should be clear, simple, and direct. The written work should be preceded *always* by these steps in oral discussion:—

1. What is to be found out?
2. What is given in the problem that will help to find this, or, what do I know?
3. How shall I proceed?
4. A statement of the work done.
5. The operations performed.
6. Does the work seem reasonable?
7. The work checked.

In brief:

1. The situation—what?
2. The method of solution—how?
3. The record of work.

Conclusions will need to be arrived at slowly and carefully. Train the child to read arithmetic thoughtfully, and to express the arithmetical ideas in clear, concise, correct terms in both oral and written work, the simpler, the better. Illustrations, by both teacher and pupils, are additional aids in the solution of written problems. Make the work vital and keep it within the comprehension of the children.

Time allotment: Recitation, 25 minutes per day, 125 minutes per week. One-third of the time is given to oral drills, one-third to discussion of problems; one-third to written testing. Seatwork, 25 minutes, daily or 125 minutes per week. Total, 250 minutes per week.

I. Integers:
1. Counting.
2. Notation and numeration.
3. Fundamental operations.
Addition.
Subtraction.
Multiplication, by two figures; by three figures.
Division: short; *long*, the special work of the year.

II. Fractions:
1. Common:
Counting.

Addition, subtraction of fractions, denominators determined by inspection only.

2. Decimal:

Introduce only in form of dollars and cents.

Change fractional form to decimal form, using only simple and familiar fractions.

III. Measurement:

U. S. Money.

Liquid and dry measure.

Linear—rod.

Square measure: sq. in.; sq. ft.; sq. yd.

Cubic measure: cu. in., cu. ft.

Time: hr., da., wk., mo., yr., cent.

Weight: oz., lb., cwt., ton, dozen.

IV Applied Problems:

1. Industrial.
2. Original problems by teacher and child.
3. Problems without figures.

V. Games:

1. Scoring.
2. Racing.
3. Time tests.
4. Playing store.
5. Card drills.
6. Thinking.

REFERENCES: Myers, *Arithmetic Book I, Part II;* Belfield and Brooks, *The Rational Arithmetic;* Smith, *Primary Arithmetic;* Smith, *The Teaching of Arithmetic;* S. Y. Gillan, *Problems Without Figures;* Jessie Field, *Farm Arithmetic;* Brown & Coffman, *The Teaching of Arithmetic.*

FIRST HALF YEAR

Leading topics—the four fundamental processes with emphasis upon multiplication.

Review and drill upon the 45 combinations, the multiplication tables.

One-step problems.

Courtis' Standard Tests: October–January.

I. Integers:

1. Review and re-learn addition combinations, multiplication tables. Oral and written work.

2. Counting:

a. Begin with 1, 2 or 3, adding a number, as 7, thus, 1, 8, 15, 23, etc. Count forward and backward to 144 by 2's, 4's, 8's, 3's, 6's, 9's, 5's, 10's, 7's, 11's, 12's.

3. Notation and numeration:

a. Arabic numbers to six and seven orders.

Place and value of digits.

Period: Its right use to signify the decimal point in reading United States money. Use of comma; omission of *and* in reading whole numbers.

Translation exercises; words to figures.

Applications. Read populations of towns in Baltimore County; of counties in the state; yields of grain, fruit, vegetables, oysters.

United States money.

b. Roman numerals to L Value of numerals. Equivalents in Arabic, and *vice versa.*

c. Review all multiplication tables weekly for a month, then monthly during the first half year. Stress the 7's, 8's, 9's, and the combinations which give difficulty.

4. Fundamental operations:

Addition: See addition presented in Third Grade.

Limit to numbers of four orders, six to eight addends.

Steps: Sight work with tens, hundreds.

Reading columns by simple addends, by grouping addends.

Checking work.

Time tests: Use Courtis' Practice Tests for purposes of drill.

Terms—*addition, addend, sum.* Teach correct use of *sum.*

Application: Yields of grain, fruit, oysters, vegetables, etc.; distances, population, factory records, wages, products, expenses, sales, banking accounts, salaries, cost of meals, merchandise, school supplies.

REFERENCES: Belfield and Brooks, pp. 132–135; Myers, pp. 142, 143; Nichols, III, pp. 11, 48, 108.

Correlate drill problems with the number combinations, and emphasize the difficult combinations until correct response is automatic. Present the following:

(a)

8	9	6	7	9
8	6	5	1	8

and reverses

(b)

8	1	5	6	8
9	7	6	9	8

(c)

1	5	7	2	8
8	9	4	1	3

(d)

3	1	4	9	8
8	2	7	5	1

The following problems for drill emphasize each combination in many relations. Give pupils an opportunity to make similar problems, by which to increase their speed and accuracy. Concrete problems can also be made from these abstract drills. Train pupils to read the following at sight, announcing results; dictate them orally also.

6 and 5 equal 11.

							4	5	3	9	6
3	4	2	8	7	0	5	4	4	4	1	4
6	5	6	5	6	5	6	5	6	5	6	5
5	6	5	6	5	6	5	6	5	6	5	6
–	–	–	–	–	–	–	–	–	–	–	–

6	25	46	95	76
5	6	5	6	5
–	—	—	—	—

15	56	105	206	165
6	5	6	5	46
—	—	—	—	—

			158	
	31	4	412	
40	8	75	333	
16	46	56	242	784
22	33	64	613	512
33	22	41	363	313
64	36	13	125	332
42	64	43	124	456
—	—	—	—	—

7 and 1 equals 8.

10	20	35	11	21	34	50	62
7	1	7	3	7	3	1	5
1	7	1	4	10	1	7	1
—	—	—	—	—	—	—	—

48	26	19					
1	57	17	21	47	51	67	41
7	21	61	7	1	7	1	7
—	—	—	—	—	—	—	—

			13	27	25	19
17	91	37	41	1	31	61
1	7	1	4	17	47	57
—	—	—	—	—	—	—

			541	89
			72	714
		774	914	163
	90	113	241	211
	5	721	231	512
	2	352	313	145
	1	605	123	501
	—	—	—	—

8 and 8 equals 16.

8	18	48	58	88	
8	8	8	8	8	
—	—	—	—	—	

8	2	7	9	8	6	5	
8	8	8	8	8	8	8	
0	8	8	8	8	8	8	
–	–	–	–	–	–	–	

	68	56		39	34	409	76	178
8	44	18	25	25	70	176	828	784
8	34	45	8	13	28	732	234	204
18	15	33	14	46	25	253	434	525
48	83	58	34	2	43	465	658	143
—	—	—	—	—	—	—	—	—

					3
					5
		5	6	1	4
	6	8	3	5	3
	2	8	3	2	1
	0	5	5	6	3
	3	3	2	2	3
	5	4	6	2	2
	4	4	4	3	4
	4	2	4	3	4
	8	6		8	8
	—	—	—	—	—

9 and 6 equals 15.

2	3	4	6	8	7	9
9	6	9	6	9	6	9
6	9	6	9	6	9	6
—	—	—	—	—	—	—

6	39	56	89	76	
9	6	9	6	9	
—	—	—	—	—	

				87		187
			644	563	6948	694
		745	262	253	4034	505
		431	459	742	0215	412
	2	330	242	115	5153	634
46	45	329	434	452	1393	929
9	142	456	535	426	9207	633
6	36	253	364	349	4532	633
—	—	—	—	—	—	—

9 and 8 equals 17.

4	7	10	15	8	9	5	6
8	9	8	9	9	8	9	8
9	8	9	8	8	9	8	9
—	—	—	—	—	—	—	—

12	27	93	72			
9	8	9	8	19	28	99
8	9	8	9	8	9	8
—	—	—	—	—	—	—

88	39	58	79	108	409	619
9	8	9	8	9	8	278
—	—	—	—	—	—	—

					7
					662
				43	224
				855	432
			75	126	339
			27	443	673
		97	62	424	525
	60	45	54	234	336
	4	44	44	362	043
	4	26	35	305	912
	19	52	24	652	456
	—	—	—	—	—

Subtraction

8	18	88	108	78	58	288	408	68
8	8	8	8	8	8	88	8	8
9	19	16	86	109	206	59	36	209
6	6	9	9	6	9	6	9	6
6	16	15	36	45	96	105	86	25
5	5	6	5	6	5	6	5	6
7	17	11	21	37	51	47	91	27
1	1	7	7	1	7	1	7	1
61	9	19	18	48	39	78	59	98
7	8	8	9	9	8	9	8	9
29	58	398	469	706	106	356	475	
8	9	188	296	169	69	165	56	
1075	117	181	871	819	189	1208		
696	71	117	197	176	98	789		
1959	1865	1511	796	978	1018	1157		
998	916	607	189	859	878	591		

7 and 4 equals 11.

									8	
						2	4	8	2	8
7	17	24	57	74	97	4	7	4	7	4
4	4	7	4	7	4	7	4	7	4	17
										8
						88	82	78		2
			2	8	8	27	27	52		7
17	47		8	8	48	85	75	88		5
4	4		2	2	82	28	58	82		8
27	7		4	87	84	34	87	824		4
4	4		27	14	17	57	84	787		7
			8	7						
			8	5						
			2	1		7128				
			8	8	855	5188				
			2	2	288	8822				
			77	4	884	8287				
			54	7	117	1814				

Subtraction. Limit to numbers of four orders. Pay special attention to zeroes in minuend.

Steps: sight work with tens and hundreds.

Translation, preparatory to both oral and written work

Proof or method of checking work.

Time tests. Use Courtis Practice tests in subtraction.

Insist upon correct use of "the difference is."

Terms: subtraction, subtrahend, minuend, difference, remainder.

Applications: See above. Paying bills; buying and selling; making purchases; spending wages.

REFERENCES: Belfield and Brooks, pp. 136-141; Nichols, III, See Index; Myers, pp. 154–159; Smith, pp. 109, 176, 133, 136.

Multiplication. Limit multiplicand to four orders—multiplier to two orders—later to three orders. Pay special attention to zero in multiplier.

Steps: Compare addition and multiplication.

Multiply by two, later by three digits. Introduce zero in multiplicand, in the multiplier.

Factoring in multiplication. Correlate drill problems with multiplication facts upon which children commonly fail.

Checking work.

Time tests. Use Courtis Practice Tests in multiplication.

Terms: multiplication, multiplier, product. Insist upon correct use of "the multiplicand is multiplied by."

Principles:

1. Only one factor in multiplication can be concrete.
2. The product and the concrete factor must be like numbers.
3. The order in which the factors are used will not affect the product.

Application:

Bills, grocery, dry goods, hardware; business problems, market quotations from daily papers.

REFERENCES: Belfield and Brooks, pp. 142–149; Nichols, III, Index; Myers, pp. 160–165; Smith, pp. 87, 88, 89, 121, 137, 139, 141, 170–181.

Division. Short.

Drill in multiplication, division and part-taking tables. Add 1, 2, etc., to each dividend, and drill in division with remainders.

Steps: sight work, reading and translating, for division.

Division by one digit, by 10, 20.

Zero introduced in quotient.

Proof or method of checking work.

Time tests. Use Courtis Practice Tests in division.

Application: Distribution.

REFERENCES: Belfield and Brooks; Myers, p. 166–169; Nichols III; Stone-Millis; Smith, pp. 143–147, 151, 173, 183, 189.

II. Fractions.

1. Common:

a. Part taking in connection with multiplication tables, using 1/2, 1/4, 1/8, also 2/4, 3/4, 3/8, 5/8; 1/3, 1/9; 1/6, 1/12; also 2/3, 3/9; 5/6, 7/12; 1/5, 1/10, also 2/5, 7/10.

b. Equivalents: 1/2 equals 2/4 equals 3/6 equals 5/10; 1/3 equals 2/6 equals 3/9 equals 4/12; 1/4 equal 2/8; 2/3 equals 8/12. Teach no others.

c. Addition, subtraction. Denominators determined by inspection.

2. Decimal: Concrete illustrations; work largely oral.

a. Introduce only in form of dollars and cents. Correct use of ***and*** to indicate the decimal point.

b. Simple percentage based on the parts of a dollar:

$$\$.50 = \frac{50}{100} \text{ of } \$1 = \$\frac{1}{2}$$

$$.50 = \frac{50}{100} = \frac{1}{2}, \qquad \frac{1}{2} \text{ of } 100\% = 50\%$$

c. Change of common fraction to decimal form to gain facility.

The full development of this subject is left for the fifth grade. The work should be carried forward in this grade in simple and objective form as needed. There should be little written work in simple fractions: and all oral work should be illustrated by means of paper and blackboard work to avoid confusion of ideas. Observe that only such fractions are to be used in addition and subtraction whose denominators are determined by inspection. Simple decimals, introduced wholly through dollars and cents, may be changed to fractional form, as a convenience, thus \$.12½ may be handled as \$⅛, \$.75 as \$¾. Some familiarity is gained through parts of a dollar (parts of a hundred), and the term per cent. is used. But all this work is kept within the very simple range of the pupil's experience.

REFERENCES: Belfield and Brooks, pp. 163, 257; Myers, pp. 182, 189; Smith. pp. 152, 190.

III. Measurement.

United States money; bills, receipts, local problems.

Dwell upon cost, selling price, gain or loss.

Avoirdupois weight. Ton.

Liquid measure. Dry measure.

Linear measure. Through concrete experience, develop 16½ ft. equals 1 rd.

Time: School time, program, year, time and distance; wages, sales.

Tables should be made and memorized.

In Third Grade ideas of linear measure have been gained through experience with units of measure, in., ft., yd., in measuring lengths, heights, distances in terms of inches, feet and yards. Continue concrete work within these limits, if pupils show any indefinite grasp of the units. Work with equivalents until familiarity is gained. Introduce the rod through actual "stepping off" a rod in school yard, through making a measure or tape 1 rod in length. Develop the concept *rod* and fix it through repeated experiences. Give abstract drills upon the tables of 5½, 12½. Give concrete work with perimeter.

REFERENCES: Myers, pp. 124, 130; Nichols III (Consult Index); Belfield and Brooks, pp. 119, 146–147, 134, 155, 167, 170.

IV. Applied Problems.

1. Industrial.

a. Products of garden, orchard: cost of production, gathering, marketing; manufactured articles: cider, vinegar; gain and loss.

b. Fruit stand, lunch counter sales. Grain: wheat, corn, weight, cost of seed, of production, flour, bread, baking supplies, receipts.

c. Oyster industry: oysters gathered, wages of tongers, and shuckers; sold by bulk, by cans.

d. School supplies.

e. Purchases and wages.

f. Mail service; postage, telegraph, telephone.

g. Bills, laundry lists, sales.

2. Original problems: by teacher and children.

a. Oral and written abstract problems for drill based upon number combinations taught.

b. Problems: related to a definite centre of interest, as indicated under Industrial types.

c. Practical Problems. The article bought and sold. The arithmetical facts related to the industries should be accurate and pertinent to daily life.

3. Problems without figures; one-step problems: mainly to develop facility in reading arithmetic and in reasoning with intelligence.

a. Train child how to know what to do by developing an attitude toward solution through thinking questions.

b. Train child to estimate results.

c. Introduce small numbers, and gradually increase to larger numbers, when confusion is cleared up.

d. Adhere to one type or one process until the *form* is fixed.

REFERENCES: Jessie Field: ***Form Arithmetic.*** S. Y. Gillan: ***Problems Without Figures.***

V. Games and Devices.

1. Charts for class use: Current price lists, grocery, flower market, dry goods. Earnings of wage earners in the neighborhood. Products of the county and state. Population of towns and cities; school enrollment.

2. Cards for individual use: Make cards with written problems on one side, and abstract drill problems on the other. Use in competitive work, letting pupil keep a record of the number worked correctly in a month.

3. Team work: Organize class into small groups under the leadership of some skilled member of the class and stimulate each to secure results along the lines of some well-defined need, e. g., automatic control of tables and of forty-five combinations, of accuracy and speed in addition.

4. Competitive tests: Between sections of a class, between two classes of the same grade in the same school; inter-school contests.

REFERENCES: Belfield and Brooks, pp. 103, 106, 125, 129, 149, 165; Myers, pp. 110, 113, 126, 142, 152, 190–192; Nichols (Consult Index); Smith, 171–192.

VI. Measuring Arithmetical Ability:

The Courtis Standard Tests in September, January. Any pupil who fails to make the standard scores for fourth grade requires special attention. Organize the class into teams under the leadership of the more skilled pupils, and secure greater uniformity of result by this and other means.

SECOND HALF YEAR

Leading topics: The fundamental processes with emphasis upon ***long division.***

One-step problems mastered.

Courtis Standard Tests—June.

1. Integers.

1. Reviews: Constant and regular from the first, emphasizing the combinations in addition, subtraction, multiplication, division, and part-taking, which require drill.

2. Counting. Increase range from tens to hundreds, as 6, 12, 18; 16, 32, 48; 160, 320, 480; 166, 172, 178, 184.

3. Notation and numeration.

a. Arabic numbers as need develops, not exceeding one million.

b. Roman numerals to C.

4. Fundamental operations. Continue previous work as outlined. Work for *accuracy*, then rapidity. Multiplication and division tables, 10's, 12's.

Division drills e.g., Drill first in the multiples of 8 divided by 8: Then add 1 to each dividend

÷			÷	
8	8	64	9	= 1 and 1 over.
8	24	1/8 of 72	8	25 = 3 and 1 over.
8	32	80	8	33

Devices to stimulate interest: Competition adds interest.

Time tests for each row. Compare speed and accuracy of each.

Record of results in oral work; comparisons made by pupils.

Long Division: The special work of the year.

This is the new written process; the division tables have been constantly used with the multiplication tables, and the pupils have used short division freely. The *written form* in long division needs to be emphasized. For uniformity use the form $6 \overline{)\,72}^{\,12}$ drawing the vinculum and placing the quotient above the dividend.

Division is the most difficult of the four fundamental processes, since it involves multiplication and subtraction as well as division. The first exercises, to impress the form, and the various steps, may be simple; as

$$\begin{array}{r} 468 \\ 4 \mid 1872 \\ 16 \\ \hline 27 \\ 24 \\ \hline 32 \end{array}$$

Pass from this to the addition of the *zero* to the divisor, and to simple divisors, as 11, 12, 13, 15.

Smith's Primary Arithmetic indicates very clearly the steps of increasing difficulty.

Give problems which afford drill upon placing the zero in the quotient.

Short division reviewed. Express in fractional form; in long division form. Limit the dividend to four orders, divisor to two orders. Only strong classes should use three figures in the divisor.

Steps: Sight work. Reading or translating for division, as

$$
\begin{array}{r|ll}
 & 398 & \\
15 & 5970 & 4500 \\
 & 45 & 1350 \\
 & 147 & +\ 120 \\
 & 135 & \\
 & 120 & \\
 & 120 & \\
\end{array}
$$

Division by 10, 20, etc.; 21, 31.

Zero introduced in quotient.

The remainder in fractional form.

Checking work, by multiplying divisor by quotient and adding remainder.

Time Tests. Use Courtis Practice Tests in Division.

Terms: Dividend, divisor, quotient, remainder.

Correct use of division terms: e.g. In the division process, a child should be habituated to say, "12 is *contained* in 48," not, "12 *goes* into."

Applications: Division of property; land, money.

Distribution.

REFERENCES: Belfield and Brooks; Myers, pp. 166–169; Nichols III (Consult Index) Smith, pp. 143–147, 151, 173, 183, 189.

II. Fractions.

1. Common:

a. Addition, subtraction. Review and extend work previously given within simple limits and with concrete illustration.

b. Improper fractions, mixed numbers. Reduce improper fractions to mixed numbers. Addition and subtraction of mixed numbers within limits of 1/2, 1/4, 1/8; 1/3, 1/6, 1/12; 1/5, 1/10. Teach no others.

c. Multiplication. Integer by fraction; by mixed numbers.

NOTE: All this work *is oral*, and used only as required in application to real, every day problems.

2. Decimal:

a. Reading dollars and cents as hundredths.

b. Percentage based upon the parts of a dollar, 50% or 1/2, 25% or 1/4, 33-1/3% or 1/3, 66-2/3% or 2/3, 20% or 1/5, 10% or 1/10.

REFERENCES: Belfield and Brooks, pp. 163, 257; Myers, pp. 182, 189; Nichols III (Consult Index); Smith, pp. 152, 190–.

III. Measurement.

Continue drill and application upon the tables previously given.

1. Dozen, quire, gross.

2. Linear measure: Review idea of rod, and teach *mile*. Estimate distance from school to home, from town to city, through child's experience of distance; to the Bay, to Washington, to New York, to London. Use map and scale for mile. Find perimeters of lots, of fields.

3. Square measure: Sq. in.; sq. ft.; sq. yd., objectively then by scale.

In Third Grade the children have gained an idea of the units of square measure as compared with the units of linear measure. Repeat similar experiences. Construct out of paper the units of square measure. *Cover surfaces* of books, desks, paper,

with square inches, square feet, until measurement of surface is clearly defined. Keep all work within the grasp of pupils by presenting the work wholly in relation to surfaces which children can *handle* and *measure*, thus verifying their statements. Keep the work both oral and concrete.

Estimates should be made of areas of books, of desks, of window panes, of window space, of floor space, of garden beds, of yards, of a nearby lot, and actual measurements made to test the work, keeping the work at all times within simple limits. Aim to relate the work to some definite need.

4. Cubic measure: Cu. in., cu. ft.

Bring out difference in cubes, surfaces and lines, three dimensions, two dimensions, and one dimension. Use cubes and make comparisons. Familiarize the pupils with the units of measure. Very simple problems may be given, but leave to later grades the study of volume related to the larger problems of every day life.

REFERENCES: Belfield and Brooks, pp. 73, 75, 77, 101, 187, 189, 209; Myers, pp. 68, 80, 83, 84, 133; Nichols, Consult Index; Smith, pp. 101, 103, 203.

IV. Applied Problems: Industrial, Social and Commercial:

a. Portfolios, book covers, rugs, table covers, pillow covers, and other objects in school room.

b. Geography:

Clothing: wholesale and retail goods; merchant, tailor, men's clothing; women's clothing, furs.

Cotton and woolen mills.

Factory problems.

Accounts: weekly, monthly.

Lumbering: tree products.

House furnishings: furniture carpeting, papering, walks and grounds.

Heating: coal, wood, problems.

Lighting, gas, electric, kerosene.

Rents.

Transportation: distances, shipping, freight, cost of roads.

Dairy problems: garden problems florist problems. Earning money: charity sales, wages.

2. Original problems: Made by teacher and children from accurate data secured in relation to the industrial topics.

Late in year *two-step problems* may be given, but at all times should be kept within pupil's comprehension through the *use of numbers which have meaning and content* to them.

3. Problems without figures, to give opportunity to read arithmetic intelligently and to reason clearly.

a. Secure facility by reading and discussion, by indication of processes, by oral and written problem making.

V. Games.

Scores in various ways.

Time tests.

Class contests. Interschool contests.

VI. Measuring Arithmetical Ability:

The Courtis Standard Tests, Woody Tests, Studebaker Practice Exercises, and the Stone Reasoning Tests for the combinations. Any pupil failing to attain the standard score needs special attention from teacher and class mates. Diagnose the case with care and apply specific remedial work by which to secure automatic recall and therefore the greatest efficiency of result in class work.

Upon completing the year's work the pupils should have acquired automatic memory results in the forty-five combinations and multiplication tables; and should have acquired the ability to read and write numbers within six orders; to use the four processes *accurately*, and with a fair degree of rapidity within the field of integers; to solve problems within the range of their experience involving these processes; to handle the facts of denominate numbers with ease; to use simple *fractional* forms intelligently.

MATHEMATICS IN GRAMMAR GRADES: SUGGESTIONS FOR TEACHING.

I. The Aim in Teaching Arithmetic (From Young: *The Teaching of Mathematics*).

As purposes of the teaching of arithmetic these may be mentioned:

1. "To teach the child the mathematical type of thought.
2. "To arouse his interest in the quantitative side of the world about him; arithmetic is a commercial subject.
3. "To give accuracy and facility in simple computations.
4. "To impart a working knowledge of a few practical applications of arithmetic.
5. "To prepare the way for further mathematics."

II. What is comprehended in the solution of any piece of mathematical work (Young):

"The execution of any piece of mathematical work consists of several parts, none of which may be neglected.

1. "Grasping the problem—getting a clear idea of what is known and what is required.
2. "Planning the work—deciding how to ascertain the desired information from the known facts. The first plan made may not be successful, but there should always be an intelligent plan.
3. "Execution of the plan. This is carried so far that one is convinced either that the plan will not work (in which case he tries another), or until the result is attained.
4. "Testing the result. Compare the result with the data of 1, and make certain that one has done what he set out to do.

III. Drill—Accuracy and rapidity:

"There is not as much *trial and error* with small children as there should be. There is too much mnemonic drill. There should be more trial and error, but always with verification." (Thorndike.)

Accuracy and a fair amount of speed in the performance of simple arithmetical operations are demanded by practical needs.

"The employer maintains that it is difficult to hire a boy who is accurate and who has a mastery of even the four fundamental processes.

"Teachers in the upper grades contend that the pupils who enter their classes are not prepared to carry the work because their thinking is illogical and their ability in computation is poor."

The demand then is for *accuracy* in both *thought* and *computation.* David Eugene Smith says, "It is the loose manner of writing out solutions tolerated by many teachers that gives rise to half the mistakes in reasoning which vitiate the pupil's work, and teachers are coming to recognize that inaccuracies of statement tend to beget inaccuracy of thought and so should not be tolerated in the schoolroom."

There is a mathematical language, just as there is an automobile language, or a literary language, or a music language. Sufficient drill to insure this is indispensable. That this drill should be chiefly on the simplest and easiest combinations and not carried on into the more complex forms until the simplest are well mastered, has already been pointed out.

IV. Practical applications:

"In teaching practical applications of arithmetic the object is not so much to anticipate all possible applications that the pupil may have occasion to make, as to develop the *power to apply*, and to show how indispensable arithmetic is in every day life.

"It is better to teach the unchanging fundamental principles and operations and train to adaptibility in applying them wherever needed, than to attempt to give a semi-professional training which may be out of date by the time the opportunity comes to put into practice.

"As to subject matter, the line may perhaps be drawn by including only such problems as average citizens might have occasion to use without following any particular trade or occupation. (This may include problems *about* many trades and occupations, but only such as would arise in the experience of those not following the trade or occupation in question.)"

Thorndike says: "The best solution for making arithmetic touch the life-side is to have several or many text-books in arithmetic that embody the real life the child may encounter: cash-girl, Saturday night clerk, keeping household accounts.

"There are two kinds of problems:

a. "The real problem or real life situation to the child.

b. "The described problem. This is harder than the real problem. (Described problems are sometimes real situations.)

"The real problem should precede the teaching of the process. Then the mere manipulation should be freed from real life."

V. Some inaccuracies in statement (From Brown and Coffman: *The Teaching of Arithmetic*):

1. Inaccurate: $3+4=7+5=12\times2=24$
   Accurate: $3+4=7$; $7+5=12$; $12\times2=24$
2. Inaccurate: $4^2/_3=^8/_{12}$ Accurate: $4^2/_3=4^8/_{12}$
   $3\frac{1}{2}=^6/_{12}$ $3\frac{1}{2}=3^6/_{12}$
   $2\frac{3}{4}=^9/_{12}$ $2\frac{3}{4}=2^9/_{12}$
   $9+^{23}/_{12}=10^{11}/_{12}$ $10^{11}/_{12}$
3. Inaccurate: $2\times\$50.=100$ Accurate: $2\times\$50.=\$100.$
   $2\times50=\$100$ $2\times\ 50\ =\ 100$
   $\$100\div4=25$ $\$100\div4=\$25$
   $100\div4=\$25$ $100\div4=\ 25$
   $\$100\div\$4=\$25$ $\$100\div\$4=25$
4. (a) Inaccurate: 4 ft. $\times$ 5 ft. = 20 sq. ft.
   Accurate: $4\times5\times1$ sq. ft. = 20 sq. ft., or
   4×5 sq. ft. = 20 sq. ft.
   (b) Inaccurate: 27 cu. ft. $\div$ 9 sq. ft. = 3 ft.
   Accurate: 27 cu. ft. $\div$ 9 cu. ft. = 3
5. Problem: Two-fifths of a number equals 12. Find the number.
   Inaccurate: $^5/_5$ = the number Accurate: $^5/_5$ of the number = the number
   $^2/_5=12$ $^2/_5$ of the number = 12
   $^1/_5=\frac{1}{2}$ of $12=6$ $^1/_5$ of the number $=\frac{1}{2}$ of $12=6$
   $^5/_5=5\times6=30$ $^5/_5$ of the number $=5\times6=30$
6. Inaccurate: $100\%=^{100}/_{100}$ Accurate: 100% of the number = the number
7. Inaccurate: $15°=1$ hour of time Accurate: 15° correspond to 1 hour of time.

VI. Accuracy and computation (checks, approximation and verification):

The subject of checks is closely related to that of accuracy of computation. Even the professional mathematician does not guarantee the accuracy of his results until he has applied to them some adequate check.

Some simple checks will be found in the basal text for the grade, and should be used regularly and systematically by the pupils.

1. *Checks and verification:*

"The child feels a strong need of a check, and will have it. The only question is which—the book of answers, the dictum of teacher, or his own verification? Let him verify, even if he works only one-third as many problems. Each verification is a problem. When by repeated verification he feels himself that he can dispense with verification, and still *guarantee* the correctness of his results, let him do so. The essential thing is that he get the result right and know

that it is right. He will in addition have gained what is more valuable than skill in computation,—well-grounded self-confidence. In actual life there are neither answer books nor kind teachers. The work must be *right;* mistakes usually mean loss to those who make them."

"Addition may be checked by adding up and down, subtraction by adding the difference to the subtrahend, multiplication by breaking the multiplier up into two factors and multiplying by each in turn, division by multiplying quotient and divisor, etc. The solution of every problem, however, is made up simply of a succession of these operations. Each one of these should be checked before going on. In many instances, especially where the numbers are small, repetition or careful scrutiny of the work of that step is sufficient check. Particular types of problems sometimes have convenient checks of their own; for example, in problems involving equations, substituting the result found in the relations given in the problem; in square root, squaring the result, etc." (Brown and Coffman.)

2. *Approximating or estimating as a check:*

If teachers would drill their pupils more frequently in approximating results, the number of absurd and impossible answers would be reduced. In such questions as $48 \times 36 = ?$ a child should quickly note the approximate value of 48, which is 50, and of 36, which is 35, and say, "The answer will be about 1750." Then the teacher should insist upon the verification of the approximation. Too often pupils submit an answer of $480 when the result should have been $4.80, or a result of $54.16, when the correct result is a hundred times as large.

Approximating results has this great advantage: it aids a child to sense the numerical value of numbers. In such a question as "$3\frac{1}{8}$ divided by $\frac{9}{16}$?" the pupil too often goes heedlessly into the process. He may probably arrive at the correct result, but perhaps if you should ask him "About how much will the answer be?" he will reply heedlessly; approximated answers to this question, given by children in the same class, have brought forth such a range of answers as "4," "8," "$\frac{1}{2}$," "16" when it should have been a habit, even in the sixth grade, for a pupil to have thought of "$3\frac{1}{8}$ as about 3," of "$\frac{9}{16}$ as about $\frac{1}{2}$," "therefore, the answer will be about 6—really less than 6, but more than 5." By verification the result can be proven as follows:

$$3\tfrac{1}{8} \div \tfrac{9}{16} = \tfrac{25}{8} \times \tfrac{16}{9} = \tfrac{400}{72} = 5\tfrac{40}{72}$$

VII. Elimination:

The progress of our age and the needs of the day permit marked omissions in the subject matter of arithmetic, even as it was taught during the last decades of the nineteenth century. Some of the omissions are:

1. G. C. D. or L. C. M. of large numbers otherwise than by factoring.

2. Fractions with large or unusual denominators.

The following letter from the "Hochschild, Kohn & Co." department store of Baltimore should help us to rationalize the work; it was written to one of the Baltimore County School children who asked for information regarding the fractions in use in the store:

March 13, 1915.

MASTER FREDDIE JONES,
Bengies, Md.

DEAR FREDDIE: Your card of March 9th has been received, and we are glad to answer your question in regard to the fractions which we use in this store:

The usual fractions, or parts of things, which we sell are parts of pounds, parts of yards and parts of dozens; we sell 1/2, 1/4, 1/8, and 3/4 of a pound of candy; 1/2, 1/3, 2/3, 1/4, 3/4, 1/8, 3/8, 5/8 and 7/8 of a yard of cloth or ribbon; 1/12, 1/2, 1/3, 2/3, 1/4, 3/4, 1/6, 5/6, 5/12, 7/12 and 11/12 of a dozen buttons, or of a dozen plates or cups and saucers, etc.

These are the fractions which are used most often, though sometimes a customer may ask for exactly 7 inches of a yard of lace or 19 inches of ribbon. Can you tell what fraction of a yard we would sell her in such a case? Can you tell why we do not sell 2/8, 2/4, 3/12, 4/8, and 10/12 of anything?

Do you like your arithmetic lessons, and do you find fractions easy or difficult? In any case they are very important for a boy to master if he is going to be a successful business man. Are they not?

Very truly yours,
HOCHSCHILD, KOHN & CO.

3. Compound or complex fractions as a special topic may also well be omitted.

4. All measures not actually in use in the community at large: Troy, apothecaries, dram.

5. Reduction of decimals to common fractions and decimals beyond thousandths should receive little emphasis.

6. Circulating decimals. The topic should be studied as a part of infinite series in algebra.

7. Square root and cube root except by factoring.

8. Profit and loss as a separate subject.

9. True discount. Bank discount has taken its place entirely.

10. Partial payments in the form of state rules and irregular endorsements.

11. Equation of payments.

12. Compound proportion has been largely replaced by unitary analysis. Simple proportion is of some importance, but is best treated as an equality of two fractions.

13. Business problems which do not conform to the usage of the day.

14. Large numbers and exercises involving many numbers should also be excluded as a rule.

Large numbers when used should usually be taken from real life: statistics from newspapers; financial facts of political, commercial, and industrial matters—where the use of large numbers is necessitated by the facts of the case.

VIII. Definitions and rules (From Young, *The Teaching of Mathematics):*

"Two extremes with respect to the treatment of rules have been advocated. The first makes the work of arithmetic largely the mechanical application of rules dogmatically stated. The other attempts to banish rules entirely from the subject. The golden mean would seem to lie in leading the child first to understand the process by repeated thinking out of all its steps; second, to notice that in all the problems the procedure has been the same, then to describe the process so that it can be applied in other problems without thinking out the whole process anew. This succinct direction is a rule. In other words, rules are very valuable auxiliaries when they are reached by the child himself under guidance and assistance; when he recognizes a rule as a convenient way of stating for permanent preservation and use, the processes which he has found and used in a tentative manner. With respect to the topic to which it relates, the rule is a summary, at the close of the work; for the future, it is a tool to be used whenever needed."

IX. Varying forms of solution:

Very few operations are so simple that they cannot be performed in different ways. Even the fundamental operations are no exceptions. The question then arises: To what extent is it advisable to teach only one form of solution, and to require adherence to this form?

It would seem that a simple form should be carefully taught at first; that will of course be used which, on the whole, is the most easily understood and applied. After it has been sufficiently mastered in theory and practice alternate forms may be introduced, if needed, and compared with the form first taught. After one mode of solving some type of problem has been sufficiently mastered, it is instructive and helpful to study other forms also, but it is ques-

tionable whether as a rule advantage is gained by teaching a second mode while the first is not comprehended. "It is easier not to change horses in the midst of the stream."

X. Oral and written arithmetic:

I. Oral Arithmetic

The importance of oral arithmetic is generally recognized. The term is here used to cover all work, of which none is written, whether it is actually rehearsed in words or simply performed in the thoughts. In this sense the typical form of arithmetic is oral; writing is an aid that is used when the numbers involved become too large or the relations between them too complicated to be carried accurately in mind. Written work is indispensable, but it is only so because of the weakness of the mind. *In most of our classes too much written work is required.*

"This gives a hint for the order of written and oral work. The oral work precedes; in it are cultivated especially the idea of number, intelligent grasp of the numerical relations and processes, clearness of thought and speech, the power to grasp a problem clearly and to make simple inferences. In it, principles and methods are made clear by use of very small numbers; when these are understood the numbers are gradually made larger and the data more complex. When no longer easily carried in the mind written work comes to the rescue, and of course has a technique of its own to be learned.

"Written and oral work are complementary phases of the same subject, the same instruction. To separate them into two distinct subjects, with separate class periods, text-books and topics, is as unwise as it would be to have one class period regularly devoted to oral geography and another quite separately to written geography."

II. Written Arithmetic

David Eugene Smith in *Teaching of Arithmetic* says:

"The fundamental question is the same: Shall written work be considered from the standpoint of the answer only; as a business man would be inclined to do, or from the standpoint of the logic of the school, the often non-practical school?

"We need to distinguish between two lines of work, equally important; the one relates to accuracy and speed in operation, the getting of an answer as a business man would, with no circumlocution and no superfluous symbols or operations; this is the mechanical part of the problem and there must be abundant exercise on this side. Then there is the equally important side of the reason-

ing, explaining why the mechanical work is performed as it is, why we multiply instead of divide, and how we know that the result is 'hours' instead of 'degrees,' or 'cents' instead of 'yards of cloth.' Here the step form of analysis may be depended upon to show the pupil's line of reasoning. These two lines of written work are, therefore, legitimate. What, then, is illegitimate in written work, and what are the dangers to be guarded against in that which we do adopt? As to the first, it may be laid down as an axiomatic fact that a form that states or seems to state a falsehood is illegitimate. That is, $30^{\circ} \div 15 = 2$ hours, is a false statement; it is not even excusable on the score of brevity, since $30 \times {}^{1}/_{15}$ hr. $= 2$ hrs. is as brief, is true, and is as easily explained as any form. So $6 \times 15 = 90$c. is a false statement and should not be tolerated, although $6 \times 15 = 90$, or 6×15c. $= 90$c. is legitimate."

XI. The algebraic side of arithmetic:

The use of letters to represent numbers is within reach of the child's intellect at an early age and can be understood easily and naturally.

The formal study of equations for their own sake, their transformations and solutions, falls within the provisions of algebra. In arithmetic, and at the age at which a child usually studies arithmetic, any formal study of the more difficult phases of equations would be premature but from the first the child is dealing with the equation form; e. g., $6 + ? = 9$. In arithmetic the equation is always a tool, and the extent to which it can be profitably used is marked out by the problem of arithmetic itself. Its very simplest phases suffice to make it a remarkably useful tool in arithmetic.

The use of letters to represent numbers opens the door for the application to literal numbers of all the fundamental operations of arithmetic, as well as of the combinations of these operations, of fractions, factoring, and the like. A certain degree of mechanical facility in the manipulation of literal expressions must be acquired by practice, and if the simpler forms and types only are taken up, the beginning of this practice may well be made in the eighth grade. Children enjoy this variety of calculation, but care must be taken to keep the problems simple.

Negative numbers may well be deferred to a later stage. They are not needed for the work in arithmetic, and their introduction may mark, in a sense, the transition from literal arithmetic to algebra; from the work of the grades to that of secondary school.

"There are two difficulties in the beginning of what is ordinarily called algebra—the first, the use of letters to represent numbers; the

second, the generalization of the number concept from absolute to relative numbers, positive and negative. These two points are quite independent, and there is no reason why the difficulties should not be separated. The first and easier presents itself naturally in connection with arithmetic, and leads to literal arithmetic, the letters representing absolute numbers. When this idea has become quite familiar by use, the extension of the number concept may be undertaken."

XII. Home study assignments:

The best home study assignments in mathematics that can be given is to have the pupils collect data on some given topic: e. g., grocery store prices; prices of cotton goods; measuring and recording diameters and circumferences of round objects; estimating areas of neighborhood lots.

The home assignment, so commonly given, of having children work out a number of, say, ten, examples to be brought in the next day tends to establish habits of carelessness and dishonesty in the pupils who either too frequently neglect to do the work, or oftentimes have it done for them by a classmate, a brother or sister, or a parent.

XIII. Present tendencies in arithmetic (From Brown and Coffman, pp. 349–366):

1. "To utilize the pupil's experiences thereby appealing to his interests.

2. "Social efficiency means other than mere business efficiency. The pupil has the right to be informed in regard to the broader aspects of modern, social, industrial, and commercial activities.

3. "An attempt to adapt the problem material to the needs and interests of the pupil, instead of adapting the pupil to the problem. Pupils should be encouraged to bring in problems that appeal to them as interesting.

4. "Skill—accuracy and rapidity in computation.

5. "Oral arithmetic.

6. "In the analysis of problems the pupil is encouraged to choose the method that seems best to him, and then he is asked to justify his choice.

7. "Rationaliz ng the problem.

8. "Unity of arithmetic. This refers to underlying principles rather than to mastery of rules and definitions. The pupil who does not see the unity in arithmetic fancies that he is dealing with something entirely new from the mathematical point of view every time he takes up a new topic, whereas he may be dealing with a new phase of a topic long familiar to him."

XIV. Scientific investigation of arithmetic. See the Stone Tests and the Courtis Tests for measuring arithmetical ability.

REFERENCE BOOKS: David Eugene Smith. *The Teaching of Arithmetic*, Ginn & Co.; J. W. A. Young, *The Teaching of Mathematics*, Longmans, Green & Co.; Brown and Coffman, *How to Teach Arithmetic*, 1914, Row, Peterson & Co.; Suzallo, *The Teaching of Primary Arithmetic*, Houghton, Mifflin Co.; The Fourteenth Yearbook of the National Society for the Study of Education, Part I, *Minimum Essentials in Elementary School Subjects*, University of Chicago Press; *The Connersville (Indiana) Course of Study in Arithmetic.*

FIFTH GRADE

(a) Read "Suggestions for Teaching Arithmetic: Grammar Grades," pp. 308–317, carefully many times during the year.

(b) Arithmetic has an arithmetical language. Children should be taught to use it when arithmetical topics are discussed.

(c) In this grade there should be a thorough review of the fundamental processes with integers. Then should follow a thorough presentation of the fundamental operations with fractions both common and decimal; these with the business denominate numbers constitute the main work for the year. Percentage, as such, is not a serious consideration in this grade; the only phases of it that are taken up at all are the common fractional and per cent. equivalents used interchangeably in simple problems, mainly oral; e. g., Find 25 per cent. of $16.

(d) Please remember that the entering fifth grade child in September is only of fourth grade ability. He has forgotten much during the summer vacation. Expect of him, then, what the fourth grade teacher expected of him in June and gradually introduce him to the more difficult fifth grade work.

(e) "Remember it is *with* or *against* habits already formed that new habits are to be formed. Three or four thousand times when asked to divide, the child gets an answer smaller than the dividend; division of fractions upsets this, and changes the habit. Teachers do not notice this danger point as they should" (Thorndike).

(f) Keep the fractions rational; use only such fractions as conform to business uses. Remember that Hochschild, Kohn and Co. (see "Suggestions for Teaching Arithmetic: Grammar Grades" p. 312) when writing to one of our County boys said:

"The usual fractions, or parts of things, which we sell are parts of pounds, parts of yards, and parts of dozens; we sell 1/2, 1/4, 1/8, and 3/4 of a pound of candy; 1/2, 1/3, 2/3, 1/4, 3/4, 1/8, 3/8, 5/8, and 7/8 of a yard of cloth or ribbon; 1/12, 1/2, 1/3, 2/3, 1/4, 3/4, 1/6, 5/6, 5/12, and 11/12, of a dozen buttons, or of a dozen cups or saucers, etc.

"These are the fractions which are used most often, though sometimes a customer may ask for exactly 7 inches of lace or 19 inches of ribbon. Can you tell what fraction of a yard you would sell her in such a case? Can you tell why we do not sell 2/8, 2/4, 3/12, 4/8, and 10/12 of anything?"

TEXT: Smith. *Intermediate Arithmetic*, Part I.

SUBJECT MATTER

N. B.—The subject matter is here arranged topically for the teacher's convenience. It would be a great mistake indeed to follow this order in the daily lesson plan. Life does not deal for two months with whole numbers only, then for another two months with fractions, and so on; but it uses the mathematical knowledge that fits a situation. Teach arithmetic therefore rationally.

1. Integers and their processes:
   (1) Addition.
   (2) Subtraction.
   (3) Multiplication.
   (4) Division.

Work for *accuracy* and *rapidity*. Use simple *checks*.

Acquiring skill in the fundamental processes means—

Accuracy and speed: Do not sacrifice accuracy for speed. Standardize the work by using the Courtis' Research Tests three times during the year (September, January, June), and make a graph showing the comparative ratings of your class in the three testings. Follow up the results of each test with practice work for the pupils who are below the standard in the fundamentals, and also in reasoning. Dr. Courtis has published sets of practice tests, a supply of which can be bought for $1.50 per class; they are published by the World Book Company, Yonkers, N. Y. Ginn and Company has a set of tests known as Minimum Essential tests; they are not so scientific as the Courtis tests, and are not standardized for either comparative class ratings or for time. Prof. Clifford Stone, of the Ohio State Normal School has published tests in both fundamentals and reasoning: (see Teachers College, Columbia University Publications.) There are also the Studebaker Tests published by Scott, Foresman and Co.

2. Fractions. (The special work of the year.)
   a. Common fractions:

Addition and subtraction of fractions involve the following, which must be studied before the advanced fundamental processes can be understood:—

(1) Factors; multiples; cancellation; tests for divisibility; greatest common divisor, and least common multiple by factoring and inspection only:
(2) Addition of fractions.
(3) Subtraction of fractions.
(4) Multiplication of a fraction by an integer.
(5) Multiplication of a fraction by a fraction.
(6) Multiplication of a mixed number by a mixed number (use "of" and "x" interchangeably).
(7) Division of a fraction by an integer.
(8) Division of a fraction by a fraction.

b. Decimal fractions:
(1) Notation: Not more than six orders. (Base on notation of integers.)
(2) Decimal counting.

Decimal counting is a means to overcoming the common errors in decimal notation. The common errors are:

(a) To say hundredths and write tenths.
(b) To say tenths and write hundredths.
(c) To say thousandths and write hundredths, or ten thousandths.
(d) To misplace the decimal mark when a whole number and a decimal are involved.

The following type exercises are planned to overcome these difficulties:

(a) The teacher gives the direction: "Begin with 3 tenths, decimally and count by 6 tenths until you are told to stop."

(b) The child writes:

.3
.9
.15*
—

His error is noted, and he is made to write the .15 as a common fraction 15/10; to reduce it to a mixed number—1-5/10; to then write the mixed number as a decimal 1.5.

Drill should then be given on writing such numbers as 15 tenths, 25 tenths, 29 tenths, etc.

The exercise may then continue:

(c) "Begin at 4 tenths and count by 5 tenths until you are told to stop."

(d) "Begin at 9 hundredths and count by 40 hundredths until you are told to stop."

.09
.49
.89
1.2, etc.

(e) Begin at 3 thousandths and count by 300 thousandths until you are told to stop."

.003
.303
.603
.903
1.203, etc.

There should be much drill in this type of work.

(3) Their meaning and relation to common fractions.
(4) Important equivalents.
(5) Addition of decimals.
(6) Subtraction of decimals.
(7) Multiplication, with methods for checking results.
(8) Division, with methods for checking results.

3. Denominate number tables:

"Teach denominate numbers early in the grades as the basis for forming the processes of carrying and borrowing."—Thorndike.

Add, subtract, multiply, divide, and reduce with denominate numbers using not more than two steps.

a. United States money (known in the fourth grade).
b. Time (known in the fourth grade).
c. Capacity (liquid) (known in the fourth grade).
d. Capacity (dry) (known in the fourth grade)
e. Weight (avoirdupois).
f. Linear:

12 in. equal 1 ft.
3 ft. equal 1 yd.
5 1/4 yds. } equals 1 rd.
16 1/2 ft. }

(Probably all known, but if not develop the unknown facts.)

g. Surface:
144 sq. in. equals 1 sq. foot
9 sq. ft. equal 1 sq. yd
(Known in the fourth grade.)
30 1/4 sq. yards equal 1 sq. rod. (Develop in fifth by measuring off schoolyard or class room)
(Use the other facts of the table, by referring to the text.)

h. Cubic Measure:
Develop and memorize the first three facts of the table; use the text for the remaining facts.

i. Circular measure: To be developed in connection with angles, circles, latitude, and longitude. Make and use a protractor.

4. Percentage. Simple aliquot parts of $1.00 expressed in decimal and per cent. equivalents, viz., 1/2, 1/3, 1/4, 1/5, 1/6, 1/8, 1/10.

5. Geometric measurements:
a. Surface forms:
Rectangle, oblong, square.
Quadrilaterals: parallelograms, rhombus, rhomboid, trapezoid.
Triangles: isosceles, right, equilateral.
Circles.
b. Area:
Rectangles.
Triangles.
c. Volume:
Rectangular solids.
d. Scale work:
1 inch, 1/2 inch, 1/4 inch.

6. Bills, receipts, checks.

7. Industrial, social, and commercial problems.
"The problem of making and solving either real or described arithmetic situations is not a matter of arithmetical ideas, but of not having the ability to understand the language of the questions."—Thorndike.

8. Solution of problems (much oral work):
(a) Sign solution (indicate the processes by signs; this is a great aid to the teacher in determining the child's thought processes).
(b) Analysis.
(c) Approximating.
(d) Graphs and scale work.
(e) For the written solution in practical problems the following form is advocated:
(1) Given:
(2) To find:
(3) The work done abstractly:
(4) The answer stated in sentence form:

9. Games.

REFERENCE: Smith, *The Teaching of Arithmetic*, pp. 107–127.

10. Correlate the arithmetic with industrial arts' projects, drawing, and geography.

SIXTH GRADE

(a) Read "Suggestions for Teaching," pp. 308–317, carefully many times during the year.

(b) Insist upon mathematical language when mathematical topics are discussed.

(c) In this grade there should be a thorough review of fractions, both common and decimal. The leading features of the work of the year are the completion of the work in the essential business denominate numbers and in the study of percentage. Use simple business fractions and per cents.

(d) Please remember that the entering sixth-grade child, in September is only of fifth-grade ability. He has forgotten much during the summer vacation. Expect of him then, what the fifth grade teacher expected of him in June, and gradually introduce him to the more difficult sixth grade work.

TEXT: Smith. *Intermediate Arithmetic*, Part II.

SUBJECT MATTER

N. B.: The subject matter is here arranged topically for the teacher's convenience. It would be a great mistake, indeed, to follow the order laid down, in the daily lesson. Life does not deal for two months with whole numbers only, then for another two months with percentage, and so on; but it uses the mathematical knowledge that fits a situation. Teach arithmetic, therefore, rationally.

1. Integers:
   a. Addition.
   b. Subtraction.
   c. Multiplication.
   d. Division.
   e. Squares of numbers between 1 and 25 (the two exact factors).

   Work for accuracy and rapidity. Teach simple checks. See that the pupils acquire skill in the fundamental processes.

2. Accuracy and speed: Do not sacrifice accuracy for speed.

   Standardize the work by using the Courtis' Research Tests three times during the year (September, January, June), and make a graph showing the comparative ratings of your class in the three testings. Follow up the results of each test with practice work for the pupils who are below the standard in the fundamentals, and also in reasoning. Dr. Courtis has published sets of practice tests, a supply of which can be bought for $1.50 per class for a year; they are published by the World Book Company, Yonkers, N. Y. Ginn and Company has a set of tests known as the Minimum Essential tests. They are not so scientific as the Courtis tests, and are not standardized for either comparative class ratings or for time. Prof. Clifford Stone, of the Iowa State Normal has published tests in both fundamentals and reasoning (see Teachers College, Columbia Univ. Publications). The Studebaker Practice Tests are published by Scott, Foresman & Co.

3. Fractions:
   a. Common fractions:
      (1) Addition.
      (2) Subtraction.

(3) Multiplication.
(4) Division.
(5) Insist upon the use of such language terms as: "factors," "multiples," "tests for divisibility, etc."
(6) Teach short form of factoring—2^2 2^3 3^2 etc.
(7) Keep the work in fractions simple.

b. Decimal fractions:
(1) Notation (to six orders).
(2) Decimal counting (See the fifth grade course for suggestions).
(3) Addition.
(4) Subtraction.
(5) Multiplication.
(6) Division.
Continue to drill.
Use numbers of not more than three decimal places.

4. Percentage (the main work of the year).
Fractional, decimal, and per cent equivalents.

"In this year there should be a good deal of oral work in the common per cents of business, pupils coming to feel that pencil and paper are unnecessary in finding 12 1/2%, 25%, 33 1/3%, 50%, 66 2/3%, and 75% of ordinary numbers. As to the use of terms like 'base,' 'rate,' 'percentage,' 'amount,' and 'difference,' there is, as already stated, but little that can be said in their favor. They were invented in the rule stage of arithmetic, and have served their purpose. Of course, we need 'rate,' it being a stock term of the business world. 'Percentage' is, however, rather confusing than otherwise, (1) because it is understood by the pupils as the name of the subject as a whole, and (2) because the business world does not use it quite as the school does. 'Base' means so many things in mathematics that its use is equally confusing, while in the case of 'amount' and 'difference' this disadvantage is still more noticeable. On the whole, therefore, it is as well not to use these terms, al-although they are found in most of our leading books today because of the demands of teachers.

"It should also be remarked that if the use of 'X' is allowed, there is no excuse for the old formulas of percentage. They are nothing but condensed rules; if they are not explained, they defeat part of the purpose of studying arithmetic; if they are explained, they are much harder than the equation with the single letter 'X.' . . .

"It is well to bear constantly in mind, in the midst of the large number of possible cases of percentage, that the two important things in the subject are these: (1) to find some per cent of a given number; and (2) to find what per cent one number is of another. All the rest is relatively unimportant, and on these two the emphasis should accordingly be laid." (D. E. Smith: The Teaching of Arithmetic, pp. 183–184.)

5. Denominate numbers:
a. Reduction: Not more than three steps.
b. Processes:
(1) Addition.
(2) Subtraction.
(3) Multiplication.
(4) Division.
Not more than three orders.

c. Tables used in the immediate daily, social, and industrial surroundings:

Square	Avoirdupois
Cubic	Circular
Dry	Wood
Liquid	

d. Relation between facts of the different tables: e. g. a cubic inch and a gallon.

6. Geometric measurements:

a. Surface forms (Rectangles, quadrilaterals, triangles, circles).

b. Area (Rectangle, triangle, circle).

NOTE: In the circle develop, by measurement, the relation between the *diameter* and the *circumference*.

c. Volume (square prism, pyramid).

d. Scale Work—1 in., 1/2 in., 1/4 in., 1/8 in.

e. Graphs—in thermometer readings, attendance and other statistical data.

7. X Solution of problems:

Teach the equation (1) as a statement of number relation, and (2) as an expression of the balance of values.

8. Problems dealing with the ordinary home affairs, business affairs, and industrial conditions in the neighborhood.

9. Solution of problems (much oral drill):

a. Sign solution: (indicate the processes by signs; this is a great aid to the teacher in determining the child's thought-analysis of the problem).

b. A single line statement involving the equation idea.

c. Approximating.

d Analysis.

e. Ratio.

10. Bills, receipts, checks, postal forms.

Keeping a simple personal expenditure account (debit, credit, balance).

11. Games.

REFERENCE: D. E. Smith, *The Teaching of Arithmetic*, pp. 107–127.

12. Tests for standardizing accuracy and speed—Courtis; Woody; Stone; Studebaker.

SEVENTH GRADE

(a) Read "Suggestions for Teaching: Grammar Grades," pp. 308–317, carefully many times during the year.

(b) Insist upon mathematical language when mathematical topics are discussed.

(c) In this year and in the eighth, the advanced applications of percentage form the core of the work. Simple ratio and proportion, powers and roots, are taken up and concrete geometry is begun.

SUBJECT MATTER

1. Notation and numeration:

Reading and writing all sorts of whole numbers, common fractions, and decimals to six places.

Roman notation (within present day usage).

2. Fundamental operations:
   a. (1) Integers; (2) common fractions, (3) decimal fractions.
      Proofs and checks.
      Denote factors with exponents.
   b. Denominate numbers.
   c. Simple literal numbers.
3. Rational use of large numbers (twelve figures or more):
   These are found in commercial geography statistics mainly:—
   Graphs should be used in showing the comparison. Use the most simple approximate numbers. Ex.—28,463,200 might be manipulated as 28,500,000 or even more roughly as 28,000,000.
4. Checks and tests for divisibility of numbers should be constantly applied in all fundamental operations of whole numbers and fractions.
5. Acquiring skill in the fundamental processes involves—
   Accuracy and speed: (Do not sacrifice accuracy for speed). Standardize the work by using the Courtis' Research Tests three times (September, January, June), during the year, and make a graph showing the comparative ratings of your class in the three testings. Follow up the results of the Research Test with practice work for the pupils who are below the standard in the fundamentals, and also in reasoning. Dr. Courtis has published sets of practice tests, a supply of which can be bought for $1.50 per class for a year; they are published by the World Book Company, Yonkers, N. Y. Ginn and Company has a set of tests known as Minimum Essential Tests. They are not so scientific as the Courtis tests, and are not standardized for either comparative ratings or for time. Dr. Clifford Stone of the Iowa State Normal has published tests in fundamentals and reasoning (see Teachers College Publications).
6. Rationalizing fraction work:
   Keep the fractional work rational. Remember that Hochschild, Kohn and Co. writing to one of our County boys said:—
   "The usual fractions, or parts of things, which we sell are parts of pounds, parts of yards and parts of dozens; we sell 1/2, 1/4, 1/8, and 3/4 of a pound of candy; 1/2, 1/3, 2/3, 1/4, 3/4, 1/8, 5/8, and 7/8 of a yard of cloth or ribbon; 1/12, 1/2, 1/3, 2/3, 1/4, 3/4 1/6, 5/6, 5/12, 7/12, and 11/12, of a dozen buttons, or of a dozen cups and saucers, etc.
   "These are the fractions which are used most often, though sometimes a customer may ask for exactly 7 inches of lace or 19 inches of ribbon. Can you tell what fraction of a yard we would sell her in such a case? Can you tell why we do not sell 2/8, 2/4, 3/12, 4/8, and 10/12 of anything?"
7. Denominate numbers:
   a. The necessary tables to keep the pupils in touch with ordinary business requirements.
   b. Longitude and Standard Time. (Teach just enough to show how longitude corresponds to time; then apply to geography according to the Standard Time Belts.)
   c. Metric system (when necessary for work in science and geometry).
   d. Planning home improvements:
      Study of the architect's plans (correlate with manual training.)
      Excavating for the foundation.
      Outside carpentry.
      Flooring and sheathing.

Shingling.
Computing estimates.

8. Percentage—method of teaching:

a. The connections of percentage with whole numbers and with common and decimal fractions.

b. "In this year there should be a good deal of oral work in the common per cents of business, pupils coming to feel that pencil and paper are unnecessary in finding 12 1/2%, 25%, 33 1/3%, 50%, 66 2/3%, and 75% of ordinary numbers. As to the use of terms like 'base,' 'rate,' 'percentage,' 'amount,' and 'difference,' there is, as already stated, but little that can be said in their favor. They were invented in the rule stage of arithmetic, and have served their purpose. Of course, we need 'rate,' it being a stock term of the business world. 'Percentage,' is, however, rather confusing than otherwise, (1) because it is understood by the pupils as the name of the subject as a whole, and (2) because the business world does not use it quite as the school does. 'Base,' means so many things in mathematics that its use is equally confusing, while in the case of 'amount' and 'difference' this disadvantage is still more noticeable. On the whole, therefore, it is as well not to use these terms, although they are found in most of our leading books today because of the demands of teachers. It should also be remarked that if the use of X is allowed, there is no excuse for the old formulas of percentage. They are nothing but condensed rules; if they are not explained, they defeat part of the purpose of studying arithmetic; if they are explained, they are much harder than the equation form with the single letter X. . . . .
"It is well to bear constantly in mind, in the midst of the large number of possible cases of percentage, that the two important things in the subject are these:—(1) to find some per cent of a given number; and (2) to find what per cent one number is of another. All the rest is relatively unimportant, and on these two the emphasis should accordingly be laid."

c. Fractions of 1%:

In the percentage drills pay much attention to the fractions of 1%: 1/2%, 1/4%, 1/8%, 1/10%, etc.

d. Applications:

(1) Profit and loss.
(2) Interest.
(3) Commission.
(4) Trade discount.
(5) Taxes.
(6) Insurance.
(7) Knowledge of percentage in school reports should be required.

NOTE: It would be well for the teacher to visit the bank, the insurance office, the tax office, the custom house, etc., and see what real business transactions are. These forms of business might then be organized concretely in the schoolroom, and thus the operations of real life would be presented to the child.

9. Interest (the principal application of percentage):

a. Necessary language.
b. Connection of percentage with interest for one year.
c. Interest by the common method.
d. Interest by the six per cent method.
e. Interest by the aliquot part method.

NOTE: Teach the *"common method"* and *either the "six per cent" or* the *"aliquot part"* method.

10. Solution of problems: (let the problems touch the life of the children. Much good material for the problems can be gotten from the cookery and manual training teachers. Use industrial history, and commerical geography statistics.)

Sign solutions (indicate the processes by signs; this is a great aid to the teacher in determining the child's thought analysis of the problem).

Analysis.

Approximating results.

Ratio and proportion (avoid compound proportion).

Use of letter. The X solution.

11. Ratio and proportion: (avoid compound proportion).

Laws of ratio and proportion.

The fraction as a ratio; the proportion as an expression of the equality of two ratios.

12. Bills, accounts, checks, postal forms, opening a bank account.

13. Squares and cubes of numbers; exact roots by factoring. Square root by the regular formula..

NOTE: Give situations in which a knowledge of square root is necessary, then teach the process.

14. Games. (Ref.: D. E. Smith, *The Teaching of Arithmetic*, pp. 107–127.)

15. Concrete Geometry (Hornbook, *Concrete Geometry*).

a. Recognition of surface forms:

Quadrilaterals.

Triangles.

Circles.

Polygons.

The manual training and household economics courses reinforce this work.

b. Area:

Rectangular surfaces.

Triangular surfaces.

Polygons.

Ci cle.

(Pa allel with Hornbrook, *Concrete Geometry*.)

c. Volume:

Rectangular prisms.

Triangular prisms.

Cylinder.

Pyramid.

Cone.

(Parallel with Hornbrook, *Concrete Geometry*.)

d. Graphs for statistical data. Scale drawings of some complexity.

16. Correlate the mathematics with household economics, manual training, science, and geography.

TEXTS: Appleton, Book III.* Hornbrook, *Concrete Geometry*.

EIGHTH GRADE

(a) The work of this year is in the line of business applications, including advanced mensuration, and algebra. Says David Eugene Smith, "The boy and girl should now begin to feel that the world of

NOTE—*Without extra charge, the Appleton Co. is supplying a supplement (drill work) to Book III in quantities. If you desire enough copies of this supplement to supply your class. communicate with the supervisor.

business and of life is opening before them. It should therefore be the duty of the school, even more than in the preceding grades, to apply arithmetic to the genuine problems of life, particularly with reference to the common occupations of the people." Certainly every boy and girl at the end of the eighth grade should be familiar and should discuss with ease the number experiences involved in—

(1) Making money work: Investing in Liberty Loan Bonds and Thrift Stamps.
(2) Mortgages and deeds.
(3) Buying by mail and paying by check or draft.
(4) Sale slips, bills, receipts.
(5) Fire insurance.
(6) Municipal and County Bonds.
(7) Levying taxes in town or city.
(8) Expenses for good roads.
(9) Family budgets in percents (items as follows):
    Total annual income.
    Meats and groceries.
    Rent and carfare.
    Clothing.
    Charity, church, clubs, societies.
    Savings of insurance, other investments.
    Fund for doctor's bills and emergencies.
(10) Rations or dietaries:
    Proportion of fats, carbohydrates, protein.
(11) Health measurements with a thermometer:
    At home.
    In school.
(12) Important foreign measures:
    Graphs and diagrams.
    National debts.
    Shop, factory and farm wages.
    Farm receipts.

(b) Read the "Suggestions for Teaching: Grammar Grades," pp. 308–317 carefully many times during the year.

(c) Read the seventh grade course carefully.

(d) Insist that pupils use mathematical language when mathematical topics are being discussed.

(e) It is suggested that not more than 300 minutes per week be given to the mathematics in this grade. This time allotment covers arithmetic, geometry, and algebra and seems ample when the additional mathematics covered in the household economics and manual training periods is added to the class teacher's instruction.

SUBJECT-MATTER

1. Acquiring skill in the fundamental processes:

a. Of integers:

Accuracy and speed: (Do not sacrifice accuracy for speed). Standardize the work by using the Courtis' Research Tests three times (September, January, June), during the year, and make a graph showing the comparative ratings of your class in the three testings. Follow up the results of the Research Test with practice work, for the pupils who are below the standard in the fundamentals, and also in reasoning. Dr. Courtis has published sets of practice tests, a supply of which can be bought for $1.50 per class for a year. They are published by the World Book Company of Yonkers, N. Y. Ginn and Company has a set of tests known as Minimum Essential Tests. They are not so scientific as the Courtis Tests and are not standardized for either comparative ratings or for time. Dr. Clifford Stone has published tests in fundamentals and reasoning. (See Teachers College Publications.)

b. Accuracy and speed in fractions.

c. Accuracy and speed in decimals.

These have not yet been standardized. It is to be hoped the teachers themselves will devise practice tests in decimals and fractions that will carry out the ideas Dr. Courtis is advocating in his practice tests for whole numbers.

2. Denominate numbers:

a. Use the necessary tables to keep the pupils in touch with ordinary business requirements.

b. Longitude and time. (Teach just enough to show how longitude corresponds to time, then apply to geography according to the Standard Time Belts.)

c. Metric system. (When necessary for work in science and geometry.)

3. Solution of problems:

a. Sign solution.

b. Analysis.

c. Approximate results.

d. Ratio and proportion (avoid compound proportion.)

e. Use of letters: x solution.

f. Graphs.

4. Squares and cubes of numbers; exact roots by factoring; square root by the regular formula. Avoid cube root.

NOTE: Give situations in which a knowledge of square root is necessary, then teach the process.

5. Games.

REFERENCE: D. E. Smith, *The Teaching of Arithmetic*, pp. 107–127.

6. Common business forms:

a. Bills, vouchers, and receipts, monthly statements; bills of lading.

b. Keeping accounts (personal), debit, credit, and balance.

c. A simple bookkeeping account.

d. Inventories.

7. Methods of sending money.

a. Postal money order.

b. Registered mail and express.

c. Bank checks and drafts.

d. Telegraphic money orders.

e. Express money orders.

f. Sending money abroad:

Cable, international money order, express checks, American Express checks, letter of credit.

8. Interest and Banking:
   a. Interest:
      (1) Comparison of methods.
      (2) Thorough drill in one method.
      (Use the "*common method*" and either the "*six per cent*" or the "*aliquot part*" method. Consult the seventh grade teacher and together decide upon the one method you wish to use.)
   b. Banks:

(1) Savings banks:
- Postal savings banks.
- School bank.
- Building associations.
  - Deposit accounts.
  - Borrowing accounts.

National banks:
- Special privileges of.
- Restrictions of.

(2) Commercial banks:
- Checking accounts.
- Certified checks.
- Bank Collections.
- Bank discount.

(3) Trust Companies.
- Special work of.
- Compare with commercial bank.

9. Investing money:
   a. Stocks and bonds (make the work concrete).

(1) Reliable:
- Government bonds.
- State or city bonds.
- Established corporate bonds.

(2) Non-reliable.
- Get-rich-quick schemes.
- New enterprises.

NOTE: "Most railroads and other companies issue these three forms of securities—bonds, preferred stock, and common stock. Try to secure a bond and a stock certificate to show the class. Inquire as to the securities issued by some local bank or factory. Have pupils become familiar with the market prices of the more common stocks and bonds as quoted in the Baltimore and Baltimore County papers. Teach them to understand the market quotation, and interest them in following the changes in a few stocks from day to day during the study of the subject."

   b. Real estate: (Make the work concrete.)
      (1) Ground rents
      (2) Mortgages.
      (3) Land development companies.
      (4) Planning home improvements:
         Study of the architect's plans (correlate with manual training).
         Excavating for the foundation.
         Outside carpentry.
         Flooring and sheathing.
         Shingling.
         Computing estimates.
   c. Investment in business enterprises.
   d. Life insurance. (Make the work concrete.)
   e. Fire insurance.
10. Concrete geometry (Hornbrook, *Concrete Geometry.*)
11. Algebra (through factoring).
12. Correlate with the work in household economics, manual training, science, and geography.

TEXTS: Appleton, Book III.* Hornbrook, *Concrete Geometry.*

NOTE—*Without extra charge, the Appleton Co. is supplying a supplement (drill work) to Book III, in quantities. If you desire enough copies of this supplement to supply your class, communicate with the supervisor.

HANDWRITING

Primary Grades. All written work placed upon the blackboard should be as nearly perfect as possible, according to the system now in use. In the first three grades it is essential that the alphabet both capital and small, be placed upon the blackboard as a guide and reference when in doubt. The blackboard work should present daily correct ideals of form, arrangement, and balance. All work which is hastily placed upon the blackboard for any purpose, should be immediately erased when the purpose is accomplished. Likewise all imperfect work of pupils should be erased as soon as may be. Care should be taken in requiring children to read from the blackboard only clear, legible script. Each teacher, therefore, needs to practice writing before her pupils. The only certain precaution is to rule the boards thus used, four to four and a half inches apart, both for the teacher's and children's use.

In all written work *expect* the same degree of excellence of which the pupil shows himself master in the writing lesson, except where you *designate you want speed regardless of form.* This applies more particularly to grades beyond the second. Less written work, better ideals of excellence, to be attained by each grade, and use of the scale by which a pupil may measure his own progress will lighten our effort to secure the desired result.

The handwriting scale should be placed upon the bulletin board or on the wall at a convenient height for the children's use. The habit of testing writing results should be established by permitting and encouraging children to measure their writing at regular intervals. Measurements of handwriting should be made at least three times a year upon the work of a class, judgments being made by two or more teachers In this way an idea of a standard for the individual and for the class is clearly defined and a greater uniformity of result can be attained.

In the third and fourth years the habit of comparing written work with the writing-slip copy is essential to secure correct size, form, and slant. Without this daily reminder, by which to establish the correct ideals, the writing is apt to become too small.

Writing Position. Hygienic position, freedom of movement, and well-formed letters are the essentials in all work in writing.

Directions for writing position should be cheerfully and persistently given: (1) Feet flat; (2) Back straight; (3) Head up; (4) Both arms on desk; (5) Penholder pointing over shoulder; (6) Pen or pencil held lightly.

Hygienic position is secured only by constant watchfulness during writing periods and the extension of these habits to study periods. Left-handed children need special attention, not so much to attempt to change to the use of the right hand as to correct any unhygienic position which may be assumed. Note the back and eyes in judging positions.

Freedom of movement is secured only by much practice at blackboard and in large writing on paper, by which to gain habits of muscular control. Large writing should be continued through the second year, and gradually work into the free use of the arm movement in forming the ordinary sized letters of the third and fourth grades. In the earlier grades the finger movement is necessary in getting the form of letters, but will yield to the free arm movement when this habit is acquired.

Pen and ink will be introduced in the third year, and all copied exercises should be done in ink.

Written exercises should not be used as a means of punishing a child for some offense other than carelessness in writing, and even when results are slovenly and poor, their cure is not effected by more writing, but by a change of attitude toward all work. Good, careful workmanship is found where the tone or atmosphere of the schoolroom emanates cheerfulness and earnest endeavor. Various means are used to stimulate individual effort by which to secure uniformity of result. None is of greater value than teaching the child to respect his work and to take pride in its appearance. It is not enough to work for accuracy alone. To this should be added the element of beauty. Both teachers and children need the inspiration of "making useful things beautiful." Study the following suggestions and apply art principles to daily life.

Beauty in School Work

Beauty is to count, side by side with accuracy.

I. Adaptation:

1. Paper suited to the record of work:
   a. Wide ruled paper for written work in first and second grades.
   b. Unruled for number, drawing, and cutting.
   c. Arithmetic, language, and drawing papers to vary in size according to type of lesson.
2. Pencils of good length and well-pointed

II. Arrangement:

Throughout there is a nice adjustment of part to part which produces a beautiful whole. The thoughtful study of arrangement should begin in primary grades and continue until the habit of placing any work with regard to its ultimate appearance is established.

1. A sheet should have a proper margin.

   Use margin markers or other device. The margin at right and left insisted upon in third and fourth grades, should be alike, margin at top and bottom about the same with the space at the top somewhat wider.

2. A sheet should have an orderly plan.

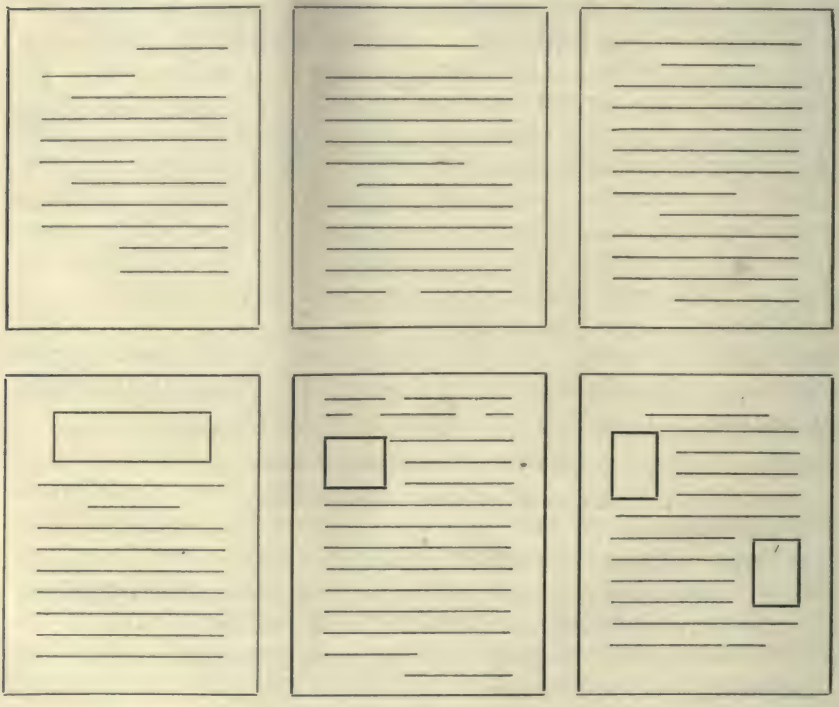
   The form depends somewhat upon the subject; but in general:

   a. Name and date at end of text, or
   b. Name after the title.

3. A sheet should have balance:

   a. Placing of title, name, and date.
   b. Arrangement of content.

Illustrations showing arrangement and balance:



c. Placing of illustrations: pictures of sketches made by the children.

d. Spacing, as in arithmetic.

e. Work checked by teacher by the proper placing of the "medal of honor;" opportunity to exercise judgment upon the good and poor work of the class, by having models properly mounted and placed before them which emphasize both accuracy and beauty in school work.

Adapted from: *School Sanitation and Decoration,* Bailey and Burrage.

FIRST GRADE

Writing is begun in the first grade but the first exercises may be termed preparatory to the specific drill work, which may be well postponed until children have been in school ten or twelve weeks. Much blackboard work will insure the use of the whole arm movement. Written work on paper when given should be large and done at first with large pencils or crayola. All written work is directed as it is important that correct habits and ideas of form should be developed from the beginning. An average of ten minutes daily devoted to writing with specific attention to correctness of form is sufficient. Near the end of the year the First Grade Handwriting Scale is used to measure each child's work, and this record is kept as a basis for measurement of future growth. All work should be done from a large copy placed upon the blackboard, and the writing slips should not be placed in the children's hands earlier than the second half year. Hygienic position, freedom of movement, and well formed letters are the essentials in all work of writing. These can be secured in first grade by direct supervision.

Time allotment: 15 minutes per day; 75 minutes per week.

The following steps are suggested:

I. Devices other than writing to fix forms and secure drills:

1. Trace with seeds or shoepegs letters and words written large on desk or paper.

2. Making words with seeds from blackboard copy.

3. Drawing of objects at blackboard which call for the use of free stroke, as bird's nest, a poplar tree, a hoop, rounded hills. Many exercises are suggested by other school activities.

4. Use script words in making sentences.

5. Use letter cards to make words.

II. The Writing Lesson:

1. Air writing following the teacher's *large* script. The written work on the board should be clear, distinct, large and perfect in form.

2. Imitation of teacher's copy in large and rapid movement at blackboard, or with soft pencil on large sheet of paper at desk, this last only when there is not available board space.

3. First writing, free and untrammeled by lines; later, when some muscular control has been gained, writing on lined paper, one-inch space. Observe that capital and loop letters are made one inch, and the one space letters a little less than one-half inch.

4. Drill upon troublesome letters or combinations, as *oy, ad, bo.* Drill upon making figures.

5. By end of the year the children should have gained mastery of the relative proportion of capital, loop, and one-space letters.

6. Do not put the copies into the hands of the children earlier than the second half year, but follow closely the form given. Always place the copy on the blackboard in *large script.* The alphabet in script should be upon all boards not later than October first.

SECOND GRADE

During the first year a fair degree of muscular control has been gained and now effort is made to secure legibility and some degree of rapidity. The writing is still large and all written work on paper is done on the one inch space ruled paper to insure habits of muscular control. An average of ten minutes daily is sufficient time to devote to formal writing lessons, but as much of the other written work as possible should be done at the blackboard under direct supervision of teacher. Application of the Second Grade Handwriting Scale should be made three times during the year to assure standards and measure progress. Writing slips may be placed in the hands of the children, but this does not exclude the large copy on the blackboard for discussion and study. Large script should be insisted upon, throughout the year.

Time allotment: 15 minutes per day; 75 minutes per week.

I. The Writing Lesson

Observe the following suggestions:

1. Desks clear; paper placed at a slight angle in the middle of the desk; pencils sufficiently long and well pointed.

2. Secure hygienic position; feet flat, back straight, head up, both arms on desk, pencil pointing over shoulder, pencil held loosely between fingers.

3. Get clearly in the child's mind what is to be done. Do not allow him to write until this is definitely in mind. Make certain that the image of the letter form is clear and distinct. Use devices to stimulate interest in the characteristics of a letter form; the story, the use of colored chalk, air writing, tracing.

4. As children write, pick out the general errors and correct at least *one* during the lesson. Continue in the next lesson until mastered.

5. Remember that good writing is dependent upon good seeing, then establish good habits by drill.

6. Write less and fix what you write; teach and clinch a few facts in each lesson.

7. The blackboard, ruling four to four and a half inches apart, is the best possible means for all written work in this grade.

THIRD GRADE

During the first and second years much attention has been given to establishing habits of muscular control through blackboard work and large, round, legible script on paper. Some children gain this control much earlier than others. Some children in the third grade should continue the use of the large writing, but the tendency is to reduce the size of the letters more nearly conforming with the copy placed in the children's hands. Daily comparison with the writing slip copy should be insisted upon to establish the ideal of correct size. Attention should now be given to arm movement, gradually leading the children to drop the finger movement which will disappear only when the arm movement is firmly established as a habit. Legibility, uniformity, and a fair degree of speed should be secured in this grade. The one-half inch ruled paper should be adopted for all practice work and for all permanent records. Pen and ink may be introduced the second half year. Application of the Third Grade Handwriting Scale should be made three times during the year as a means by which the pupil may recognize the stage of his own progress and to assure the attainment of a third grade standard by the members of the class.

Time allotment: 15 minutes per day; 75 minutes per week.

I. The Writing Lesson:

Observe the following points:

1. Establish a certain routine, reducing *waste* in time and energy.

a. Clear the desks; paper at slight slant; pencils of sufficient length and well-pointed; or, if pen and ink, inkwells in good condition.

b. Distribution and collection of writing slips without friction or waste of time.

2. Get clearly in the child's mind what is to be done. Do not allow him to use materials until this is definitely gained through observation, discussion, and further demonstration. Make certain that the photograph of the letter form is correct. Use devices to stimulate attention, to secure interest in detail upon the chief and distinguishing features of the letter.

3. After work is begun, note the most common errors and spend time in correcting the wrong impression and inhibit the wrong habit by practice. Give some individual help, but teach the class. Train the children to criticise their own work by closely comparing with the copy. Insist that the copy shall cover all previous written work, so that only the perfect form is seen.

5. See that each child's writing is uniform in height, slant, and openness of letters. Accept no written work which does not exemplify the best writing of which the child is capable. All permanent records show the same degree of excellence as the written exercise.

6. Remember that good doing is based upon good seeing. Ideals of good writing should be constantly shown in the blackboard work of teacher. Work done by pupils or hurried work done by teacher should be erased as soon as possible after it has served its purpose. Accurate, uniform, clear and distinct writing can be secured by presenting the constant ideals and establishing the habit through practice.

7. Arouse your children by movement exercises, and large free drill movement; by tests of uniformity, of form, of speed, and comparison of work with classes.

FOURTH GRADE

The work of the third grade aimed to secure legibility, and a fair degree of uniformity in slant, size, and letter form. Some attention was given to arm movement, but the idea was gained, not the habit. The work of this year is to stress arm movement and fix the habit through practice, and by this means to secure some advancement in skill. A fair degree of speed will be attained. Pen and ink should be used in all drill exercises, and in all copied work. Where pupils show facility and ease its use may be extended to some first draft work. Application of the Fourth Grade Handwriting Scale or the Thorndike Scale should be made three or four times a year, permitting pupils to measure their own progress, and to maintain the standard for fourth grade.

Time allotment: 15 minutes per day; 75 minutes per week.

I. The Writing Lesson

Observe the following:

1. Establish a certain routine, reducing waste in time and energy:

a. Clear desks, paper placed at slight slant, pens and inkwells in good condition.

b. Distribution and collection of writing slips, of paper without friction and waste of time.

2. *Teach* the writing lesson. Do not permit the pupil to touch materials until the pupil has clearly in mind what is to be done. Use devices to stimulate attention. Observe, discuss, demonstrate.

3. After writing has begun, note the most common errors. Take one of these, and present for drill. Continue with variations until mastered through practice.

4. Secure uniformity, in height, slant, size, and openness of letters by insisting upon each. Accept no written work which does not exemplify the standard which the pupil can attain. Accurate and neat uniform work is secured only by attention on part of both teacher and pupil.

5. The writing of teachers upon blackboard should be large, well spaced, and *exactly according to the present system*, to establish an ideal. Hastily written work by teacher or work done by pupils should be erased as quickly as possible after it has served its purpose.

6. Remember:

a. Hygienic position: feet flat, back straight, head up, both arms on desk, pen holder pointing over shoulder.

b. Stimulate arm movement by exercises. Extend to written work.

c. *Teach*, then *drill*. *See*, then *do*.

HANDWRITING FOR GRAMMAR GRADES

I. What is handwriting ability?

It combines the units:

1. Style.
2. Beauty.
3. Legibility.
4. Evenness.
5. Ease.
6. Character.
7. Speed.

II. Problem of handwriting in the grades.

It is not a problem at all in grades I, II, and III, as it is later in grades IV–VIII. In grades I–III the handwriting is "written spelling" and the skill side of it should not enter. "With children

of six to seven years a pressure maximum is never found in the word, but each single letter, and at the outset each single stroke is written with equal pressure."—Rusk.

"Older children and adults make the first part heavy and run off at the last. As 'eyefuls in reading' so a person writes by 'handfuls in writing' and this totality of impulse is gotten by speed which comes in grades VI–VIII."—Thorndike.

III. Legibility.

Legibility in writing depends upon:

1. Correct spacing.
2. Correct letter forms.
3. Evenness of letter forms.

Spacing is the main factor that determines legibility; evenness closely correlates with this but is not co-ordinate in importance with spacing and its importance is usually exaggerated while spacing has been underestimated. "It should be a habit to keep words four millimeters apart, letters one and a half millimeters apart, and lines seventeen millimeters apart."

4. *Form* of letters has a value for economy in education that is more important even than spacing or evenness.

IV. Individuality in writing:

"Position of writing-copy, body and fingers should be taught, given a fair trial, then [within limits] the child may violate them if he feels like it."—Thorndike.

"The handwriting of the child depends more on the copy than does that of the adult, but teachers, especially of the highest class, can readily recognize the writing of individual pupils."—Rusk.

"Children are found to differ widely (according to Ufer) in handwriting, under ten heads:

1. Unnecessary additions, for example, flourishes at the beginning and end of the word.
2. Angles in place of curves and *vice versa.*
3. Differences in slope.
4. Connection of letters one with another—with young children a complete separation between letters does not appear to exist.
5. Spacing of writing characters.
6. Distance between single words.
7. Absolute size of single letters.
8. Relative sizes of letters and parts of letters.
9. Observance of lines.
10. Form and position of the auxiliary signs like the dot on the "i."

The writing of adults discloses typical sex differences:

Originality is held to characterize a man's hand, conventionality a woman's. Consequently masculine hand-writing is thought to show a more extensive range of variability than feminine. The typical feminine hand appears to be colorless, conventional, and usually small. The typical man's hand is bold, or careless, or experienced, and above all, individual . . . .

Experiments or unconscious imitation in handwriting demonstrate a greater imitative tendency among women than among men. The masculine type writes with more pressure than the feminine, somewhat more slowly, and more completely in total impulses. The pressure is rhythmically distributed over the word so that generally the highest or maximum pressure lies at a definite point in each word. Some individuals place this maximum at the beginning, others at the end of the word. It is a special characteristic of the masculine type that the pressure increases with the speed. The feminine type, to which, however, the writing of some men conforms, writes more quickly than the masculine, but with less pressure and not in such uniform total impulses. The pressure curve has in most cases several maxima, and it is characteristic of this type that with increased speed pressure decreases." —Rusk.

V. Movements in writing:

"The movements made in writing include

1. "Those of the fingers in forming letters.
2. "Of the arm across the page.
3. "Of the movement of pronation, that is the rotation of the hand so that it may rest flat on the palm.

" . . . . . The full arm movement with the elbow resting on the desk is much more rapid than the finger and wrist movement. The latter permits of round forms and therefore a more legible hand; it is much slower than the full arm movement, requiring at least 16 per cent more time than the latter so that the loss of speed doubtless neutralizes any gain in legibility. Experience shows that neither movement should be used exclusively; the freedom of the forearm, united with the more delicate touch and shaping power of the fingers, enables the pupil to write easily and rapidly with a minimum of fatigue."—Rusk.

VI. Technique.

"The unit of writing performance would better be the *word* though the stress may need to be upon height, or form, or just one letter. It should begin with the word and continue with it."—Thorndike.

VII. Correlation between an individual's general intellectual ability and the same individual's ability in handwriting.

Thorndike found that evidence of "ability in thought and ability in movement are in adults only very slightly related. The correlation between scholarship grade and quality of handwriting is zero."

VIII. Speed and quality.

"Rapidity is in and of itself a good sign. If we know nothing about one score or so of pupils save that they are rapid writers and nothing about another score save that they are slow writers, we can prophesy that at the same rate the former group will on the average do writing of a higher quality."—Thorndike.

IX. Time-cost:

Frank N. Freeman, in the Fourteenth Yearbook of the National Society for the Study of Education, Part I, in his report on handwriting [p. 77] says:

"The standard [quality for writing in grades 5–8] can be attained with an expenditure of time of not over seventy-five minutes per week. The writer is convinced on the basis also of some of the data that it could be attained generally, as it is in some cases, by the expenditure of a much shorter amount of time. When the most efficient methods are employed it will probably be found that the expenditure of from ten to fifteen minutes in the intermediate grades [4–6] suffices to fix the handwriting habit in its main outline; and that the expenditure of a small amount of time in the upper grades [7–8] will maintain the efficiency of the habit and increase it by the amount of progress which is represented in the standard."

Freeman gives the following standard for speed per minute by grades:

SPEED STANDARD

Grades.....	II	III	IV	V	VI	VII	VIII
Letters per minute.	36	48	56	65	72	80	90

Thorndike goes even further than this and says: "One is tempted to advocate the heresy that children are taught to write too well. I personally do advocate it. If school boards would furnish, for the use of children electing writing as a study in the last two grammar grades, typewriting machines, I should certainly advise the transfer to typewriting of a child in those grades whose writing at sixty letters a minute consistently reaches 13 [see the Thorndike Scale]. For the amount of practice required to advance such a pupil to quality 16 [see the Thorndike Scale] at a rate of 75 letters a minute would much more than suffice to advance him to errorless machine writing at that rate. The value now attached to the high qualities of handwriting is, of course, largely fictitious. Employers who can afford such high qualities of writing, buy machines, to produce them. For writing cash checks, simple book entries, labels, and the like, a good plain hand or our quality 12 [see the Thorndike Scale] is entirely adequate.

"It seems likely also that handwriting has been, and is, a case of a common practical fallacy, which may be called 'learning for learning's sake.' When certain facts or acts of skill are teachable, teachers tend to teach them regardless of any intelligible service performed by

them other than the doubtful one of 'disciplining' the mind or hand or eye. Since, for instance, arithmetical methods of extracting cube root have been learned by teachers and can be taught to children, we teach them, regardless of the fact that no person in his senses would extract a cube root in that manner. Similarly it is doubtful if any intelligent person would [except to become a teacher of handwriting] pay the necessary time-cost to acquire the ability to write at 75 letters or over per minute at quality 17 or better. He would of course, learn to typewrite instead. And if an intelligent person has been artificially induced to get that ability in school, he promptly loses it thereafter."

X. Standardization: The recent movement in scientific testing of handwriting to determine its efficiency.

REFERENCES: Edward L. Thorndike, *Handwriting.* Teachers College Record, March, 1910; Frank N. Freeman, *The Teaching of Handwriting.* Houghton, Mifflin Co. The Fourteenth Yearbook of the National Society for the Study of Education, Part I, Minimum Essentials in Elementary School Subjects—*Standards and Current Practices.*

Some conclusions reached in these publications are as follows:

1. *The scale:*

Thorndike says: Handwriting may profitably be studied from three points of view: that of the physiology and psychology of movement, that of the part it may play in the intelligently directed activities of child life in schools, and that of the direct examination of the quality and speed of handwriting secured by various forms of school training. But to any study of it there is one very desirable preliminary—some means of measuring the quality of a sample of handwriting.

At present we can do no better than estimate a handwriting as very bad, bad, good, very good, or extremely good, knowing only vaguely what we mean thereby, running the risk of shifting our standards with time, and only by chance meaning the same by a word as some other student of the facts means by it. We are in the condition in which students of temperature were before the discovery of the thermometer or any other scale for measuring temperature beyond the very hot, hot, warm, lukewarm, and the like of subjective opinion. We opine roughly that, at a fairly rapid rate, writing movements in which the forearm shares will produce a better quality of handwriting than movements confined more exclusively to the thumb and fingers, but no one could estimate with surety and precision *how much* better the best rapid "free-arm" writing is than the best equally rapid "finger-movement" writing We opine roughly that drills in which good writing serves some end of consequence to the children will be more efficient than drills for mere penmanship, but no one could estimate *how much* more efficient they will be. We know that some schools secure better writing at a given speed than do other schools, but no one could tell *how much* better in any terms sure of understanding and agreement; for we have no scale to measure handwriting by. No pupil, teacher, or superintendent of schools knows how well any child, class, or group of children writes in anything approaching the sense in which we know how hot any liquid is or how long a wire is.

It is possible, however, that some critics may deny the value of the average judgment of competent people in general and declare that though that judgment pronounces two handwritings equal in merit, *he* knows that that they are not equal.

Now inconceivably he might be right. But the chances are enormously against his being right, and science naturally cannot count his assurance as of more weight than that of any other judge of equal competence.

Some more sophisticated critic may object, not that he knows that *this* scale is wrong and prefers his own supposed competence to that of forty of his peers, but that no one can know whether this or any such scale is right. For, he will add, any such scale is subjective, representing only what certain individuals think about the merit or value of samples of handwriting. In this there is some truth. There is no value in average opinion as such. The world was round, when the most competent judges thought it flat, as it is today. If it should some time be proved that evenness of width of line was the sole criterion of real merit in handwriting, the scale would be wrong.

But in the case of handwriting the only available criterion of real merit or quality or goodness is the average judgment of competent people. A hundred years from now merit in handwriting may mean something different from what it now means and a new scale may be required. But what it then means will then be determined by the average judgment of competent men and shown in a scale derived just as this one has been derived.

Another criticism may be that the scale does not guarantee agreement among the observers using it to measure a sample of handwriting. The same sample, may, it will be said, be measured by one person as equal in merit to 8, by another as equal to 10, and by still another as equal to 9. This is true, but it is not the fault of the scale. Observers will disagree in their measurements made with the scale, but *not nearly so much as in measurements made without it.* No scale guarantees absolute agreement. Observers measuring the length of this line ———— to tenths of a millimeter will not agree. But they will agree better than they would if they had no scale and judged its length as a savage might.

2. *The use of the scale:*

"The topic of this section is fitly treated in the one statement: Any measurement of the quality of handwriting may be made more accurately and conveniently with the scale, either actually present or held in memory, than without it. The reader may apply this statement to whatever cases his interests suggest. I shall mention a few of the commoner uses and explain the function of the scale as a standard held in memory.

The classroom teacher has to measure the quality of a single pupil's handwriting in order to assign him a rating in comparison with his fellows and, better still, in comparison with his own past performances. If she uses the scale either by giving its numerical measurements outright or by letting her "A," "B," "C's," or "75," "80," "82," etc., per cents, or *excellents, goods, fairs,* etc., mean certain points on the scale, her ratings will have a definite meaning to the pupil, can have the same meanings that similar ratings by other teachers in the school have, and may be used to measure the actual improvement of the pupil month by month and year by year. She can more easily and more accurately measure the relative values of the different methods of teaching which she may from time to time employ, of different lengths of periods for drill, and the like.

A principal or supervisor or superintendent of schools needs to measure the quality of the handwriting of individuals, of classes, and of all classes of the same grade, in a school or system. If he has such measures honestly made by the scale, he can compare the work of one teacher with that of another, the work within his own school with that of other schools or cities and with that of his own city five years later, the work of schools using one system of writing with that of schools using other systems, and the like.

If he tried without the scale to estimate the superiority or inferiority in handwriting of twelve-year-olds in City A to twelve-year-olds in City B, he would have to collect many samples in both cities and have them graded alike. He could define the amount of difference found only by actually exhibiting it in samples *or by making out a scale like ours*, defining it as I have done, and expressing the difference as such a distance on the scale. With the scale in use in both cities, on the contrary, if marks are honestly given by the teachers, the superiority or inferiority of any group will be measured by the difference in the scale-values of the marks themselves.

The scientific student of education will use the scale to measure the quality of samples of handwriting from individuals, classes, cities, groups chosen for grade, age, sex, method of teaching, or length of time devoted to writing, and from any other sources. He will also be able to use any marks or ratings honestly given by teachers or others.

Whoever has any occasion to define a standard of quality in handwriting can define it unmistakably and conveniently by the scale. *Business men* can decide what quality they wish the schools to secure in the boy fourteen years old who is to apply for clerical positions. A supervisor can inform all the teachers of, say, grade 7 that the minimum requirement is, say, quality 11, at a rate of 50 letters per minute, that the average pupil must be made to write at quality 13 at a rate of 60 letters per minute, and so on. Whatever standard is set will be absolutely defined by those who set it and will be clear to all those who are to follow it.

The pupil himself may profitably know and use the scale. He may see by it what is expected of him and may tell how nearly he reaches the standard and how much he has gained.

Even if precision is not desired in the estimate of the quality of handwriting—even if *good* and *bad* or *satisfactory* and *unsatisfactory* are the only ratings to be given—the scale is none the less useful. For if *good* and *bad*, or *satisfactory* and *unsatisfactory* are to mean anything, they must mean handwritings above and below some point on some scale of merit. They can be properly defined only by locating that point. And until some better scale is available that point can be located only by exhibiting samples or by stating the numerical value these samples would have on our scale.

To put the whole matter in a word, any measurement of the quality of handwriting should be made by the scale and reported in terms of the scale, for substantially the same reasons that any measurement of the length of an object should be made with a linear scale and reported in meters or feet.

Measurements may be made by the scale without the comparison of the sample with the actual scale itself. Just as one uses his experience of feet and inches as a mental standard whereby he estimates more or less accurately the length of pencils, tables, windows, and the like, without an actual rule or tape, so one may come to estimate that this sample of writing is about quality 16, that one about quality 9, and the like, from the mental standard left from examination and use of the actual scale. The scale should always be present for reference in any measurement which requires exactitude, but it will do its greatest amount of service, not by actually serving as a foot-rule for quality in handwriting, but by creating in the minds of teachers mental standards to be used in even the most casual ratings of everyday schoolroom life. To one who uses the scale, quality 18 or quality 15, or quality 7 comes to be a definite agent in determining all judgments, just as 18 inches or 15 pounds or 7 dollars is. Just as a child learns to think about length correctly and with fair precision without a rule in his hand by having measured off lengths with it,

so teachers may come to think about handwriting correctly and with fair precision without the scale before their eyes, by having measured handwritings with it. Just as the thermometer teaches us to supplant the vague "very cold," "cold," "moderate," "warm," "hot," and "very hot," by "about 0," "about freezing," "about 60 degrees," "about 70 degrees," "about 80 degrees," "nearly 100," and the like, so the graphometer can teach us to supplant the vague "illegible," "very hard to read," "a good plain hand," and the like, by judgments which mean something definite and constant to those who make and those who hear them.

In general the experience in constructing this scale gives great encouragement to the hope that for many educational facts, units and scales may be invented that shall enable us to think quantitatively in somewhat the same way that we can about facts in physics, chemistry, or economics. It has been commonly supposed that the great complexity of such facts as examination papers in spelling, manifestations of interest in history, acts of moral significance, habits of industry, essays, poems, inventions, replies to questions demanding logical inferences and other like results of education, prevents the samples composing any one such group from being measured by any one linear scale at all comparable to a foot rule or thermometer or galvanometer.

3. *Minimum essentials in handwriting:*

Freeman, in the Fourteenth Year Book, says:

In the case of a subject like handwriting, the object of which is the development of skill, minimum essentials are to be considered, not as absolute requirements, but as dependent in a measure upon the time and effort which are required to attain them. It is germane to the subject, then, to consider both the amount of skill which it is desirable that a pupil shall attain from the point of view of the demands of society and of his later life, and also the time which is required in order to attain this skill. The subject, then, may be approached from either side. We may ask, on the one hand, what degree of excellence in writing the pupil should possess in order to be able to meet the demands which will be made upon him; or we may ask, on the other hand, what degree of skill is attainable under specified skill in the school.

We shall attack the second phase of the problem first, and assume for the time being that a reasonable amount of skill is desirable and necessary for every elementary school pupil.

The distribution in time which was spent upon handwriting in the cities which replied to this question is shown in Table II. It is seen from this table that there is a wide variation in this matter. Some cities spend no time in certain grades, or spend upon an average only about 45 minutes per week, while other cities spend nearly three times as much time as this. One city, in fact, spends upon the average five times as much as do two other schools.

In endeavoring to interpret these facts it is not necessary to assume that the amount of time spent has no effect upon the efficiency of handwriting teaching. It does appear to mean, however, that it is not desirable to spend more than ten or fifteen minutes a day when this time is spent all in one period. The data which are at hand do not give sufficient information upon which to base a conclusion as to the best amount of time to give. Such a conclusion could best be based upon experiments in which different amounts of time were tried out with the same class or with the same school, and with other conditions remaining the same. The conclusion which can be drawn from the data, however, is that the superior attainment of the schools in the upper half of the whole group is not due to spending a greater amount of time in handwriting teaching.

If we compare curves for legibility and for speed, we see that the former advances steadily and at about an equal rate from the first grade to the eighth; while the curve for speed advances rapidly up to the fifth grade and then very slowly from the fifth grade to the eighth. The difference in speed of writing between the second grade and the fifth is 29½ letters per minute; while the upper grades on an average gain only 12 $^{9}/_{10}$ letters per minute above the fifth grade. This break in the rapidity of advance in speed furnishes a point of attack and raises the question whether it is necessary and desirable.

If we ask ourselves the reason for this difference in the speed and legibility, part of the answer probably is to be gotten from the fact that legibility is more readily tested in the school and that more attention is paid to it than to speed. The permanent result of the child's writing is represented in the quality of the writing, while the rapidity with which he writes is not evident merely upon the inspection of the paper. The teacher will therefore more readily notice and will be more likely to criticize deficiency in legibility than deficiency in speed.

While the diminution in the rate of increase from the fifth grade on is a natural one, and is to be explained by the lower rate of increase in motor ability at this time, yet the efficiency which has been attained in a number of schools shows that the drop is not necessary. Furthermore, the actual speed which is attained even in the upper half of the schools by the time of the eighth grade is lower than it should be. Less than 80 letters a minute is slow writing, and the standard which is laid down, of 90 letters per minute, is well within the bounds of reason.

The data which have been presented indicate that this standard can be attained with an expenditure of time of not over 75 minutes a week. The writer is convinced on the basis also of some of the data that it could be attained generally, as it is in some cases, by the expenditure of a much shorter amount of time. When the most efficient methods are employed it will probably be found that the expenditure of from ten to fifteen minutes in the intermediate grades suffices to fix the handwriting habit in its main outline; and that the expenditure of a small amount of time in the upper grades will maintain the efficiency of the habit and increase it by the amount of progress which is represented in the standard.—Fourteenth Year Book, Part I.

In Baltimore County we are planning to make a scale for handwriting based upon the system now in use in our schools, which is that advocated and published by the Baltimore Business College.

PHYSICAL EDUCATION

Primary Grades. Health is the prime requisite for efficiency and any infringement of law serves to impress its truth all the more forcibly. The school recognizes the value and aims to provide means which will insure the normal development of body and mind. To attain these ends, however, the school and home should closely co-operate toward the maintenance of conditions favorable to growth. For this reason parents and teachers should be familiar with practical hygiene, and games and plays which promote physical welfare. Whenever opportunity offers, informal health talks are given emphasizing cleanliness of person, care of body, of our responsibility for order and beauty in our surroundings, and in simple ways, social welfare as affected by health. The most important of these conditions, within the reach of all, are an abundance of fresh air and sunshine, and a proper temperature, both conducive to a wholesome, sunny atmosphere in which human plants can best grow.

At school, the best place for physical exercises is the open air. The concrete walks can often be used to advantage. A part of the short recess periods should be frequently devoted to the learning of games under the direct supervision of the teacher, or of playing games learned in indoor play. Of necessity, some of the physical work must be done in the schoolroom. Wide halls and playrooms are preferable to classrooms wherever available. Good ventilation is secured by lowering all windows a short distance from the top and raising them from the bottom at regular intervals during each session. The air needs to be changed every thirty minutes. The temperature should be about 65 degrees. At all times the lighting of the room should be carefully regulated, sufficient always to give a cheerful atmosphere and to avoid gray shadows. Children should be seated according to height, exceptions being made of those having defective sight and vision. Special care should be taken to provide pupils with desks of the right height; to place work upon boards in such position and clearness that no unnecessary eye strain results. Since habits of posture are established by daily practice it is of great importance that daily application be made of lessons in sitting, standing, walking, running, writing, reading, going up and down stairs until correct habits are attained. The correct use of the voice is also essential, corrective measures being given in

connection with music and reading, but it is necessary to warn against singing during strenuous physical exercise. Divide the class into an orchestra and players, the former providing the music while the latter participate in the game.

Play. The work of whatever nature should be so planned that it will be interesting and recreative, for the value of an exercise depends very largely upon the amount of enjoyment it gives. The plan which follows is sufficiently varied to meet the needs of the growing child and is the outgrowth of the play spirit inculcated by the teachings of Froebel who first recognized that play is an important factor in stimulating healthful, physical and intellectual growth. The right attitude toward play should be developed through fostering, directing and developing the right kind of games and plays adapted to each period of development.

Imitative Plays. In the earlier years the characteristic tendencies of imagination, imitation and love of rhythm predominate in the spontaneous play of the child as a means by which to express himself. Imaginative and imitative plays based upon daily familiar experiences, give oppportunity to lead children to graceful bodily expression and individual interpretation. Naturally there is a lack of definiteness in these games which are chiefly recreative.

Rhythmic Games. The rhythmic work consisting of folk dances, interpretative work of social and nature plays, marching, and steps, aids and abets the imaginative and imitative work by establishing through practice, definite, recurring rhythms, as aids to acquiring ease, erectness, grace in carriage and freedom of movement.

Playground Games. Indoor and outdoor games which test physical skill, speed, endurance and control are needed as children grow older, and their interest changes.

Simple apparatus for the playground consisting of swings, a ballancing log, see-saws, and a sandpile; balls, bean bags, beanbag board, ring toss, and other games which children are encouraged to bring from home for indoor games, are invaluable aids.

Results. These are the means used to enhance physical development, presented in large measure through the medium of play which taken all together aim to give training in self control, self reliance, leadership and sportsmanship. Play should be considered a part of the school work.

Strict observance of the rules of the game, and above all "fair play" in spirit as well as in practice must at all times be insisted upon. Development of character is attained through expression in natural

activity rather than through precept. Respectful and courteous intermingling of boys and girls in games of common interest should be encouraged.

The Play Festival. Play festivals in which classes of the same grade and of different grades in the same school and neighboring schools participate should be held annually as an incentive for daily practice and to encourage the play spirit in the community.

REFERENCE BOOKS: Johnson, *Education by Plays and Games*; Stoneroad, *Story Gymnastics*; Newton, *Graded Games and Rhythmic Exercises*; Burchenal, *Folk Dancing*; Hofer, *Singing Games*; Rowe, *The Physical Nature of the Child*; Gulick, *Good Health*; Gulick, *Emergencies*; Curtis, *Education Through Play*.

FIRST GRADE

"Come, let us live with our children. Play is not trivial, it is highly serious and of deep significance. Cultivate and foster it. To the calm, keen vision of one who truly knows human nature, the spontaneous play of the child discloses the future inner life of the man."—Froebel.

During the pleasant days of autumn and spring teachers should play with their children at recess as often as seems wise. Games taught indoors should be played out in the open air whenever opportunity offers. Often a larger pupil may be encouraged to direct the games of a group of smaller children.

A teacher should be entirely familiar with all the details of the game before attempting to teach it, thus avoiding waste of time, inattention, restlessness and often chaos. The game is to teach harmony, social adjustment, economy of effort, alertness, as well as bodily grace.

Avoid unnecessary talking, use quiet tones, maintain a cheerful manner, secure a joyous response from the class, without that nervous reaction attendant upon hasty or ill advised commands.

Remember that the younger the children the greater the need for a change in activity. If for any reason, the game is a quiet one, or one in which only a few children take part, a quick march, a lively run, or a lively game of "Follow the Leader" should be given before resuming work.

Keep the room well ventilated at all times, and flood with fresh air during the game period.

Remember that children should be *self-active.* Allow them to help in the arrangement of the game, choice of players, and judge contests.

Remember that they respond when *interest* is strongest. Foster the spirit of healthful play. Develop the right spirit in competition, a desire to work for their side and to accept defeat gracefully.

Remember that children work best when *motive* is well defined. Keep in mind a definite result toward which each game contributes its share. Play is educational when there is a clear understanding of its purpose, when alertness, attention, accuracy of motion are demanded; when fair play, exercising courtesy, is emphasized; when bodily control is secured by teaching economy of effort.

Remember that games should be closely *correlated* with other phases of the work using them as but another medium of expression. For this reason the spirit of the game is introduced to advantage in the presentation of lessons, in rest periods for purposes of relaxation, in sense games as a means to train the habits of observation as experiment, in rhythmic work to give delight in interpretation to music and in simple drills to establish correct habits of posture.

The work is varied according to the needs of the children, each phase containing an element which makes an appeal to their interest. The following course is suggestive indicating the type of work and the amount which can be accomplished during the year. Suggestive detail may be found in *Graded Games and Rhythmic Exercises* by Newton, and in *Education by Plays and Games* by Johnson. Good folk dances with music may be found in Hofer's *Singing Games*, and Burchenal's *Folk Dances*. *Story Gymnastics* by Stoneroad gives excellent suggestions for imaginative plays based upon appropriate and seasonal experience.

Time allotment: 15 minutes per day. 75 minutes per week.

I. Posture Drills:

1. Sitting. Secure good posture. Sit well back in seat, hands in lap, feet flat on floor.

2. Standing. Secure good posture. Ease of movement in rising. Stand clear of desk. Drill on quietness and ease of movement.

3. Recitation, as in reading. Head up, chest out, good breathing, book held in left hand, right hand free, facing audience.

4. Writing. Both arms on desk, paper on slight slant, loose grip of pencil.

5. Breathing. Inhale, exhale with face toward window.

6. Singing. Same as 1 except back is away from seat.

7. Dismissal. Plan by which to save unnecessary waste of time, e. g. give commands: Rise, Stand, Pass. All pass in single file to cloak room without passing through other aisles.

8. Give definite drills upon getting to and from blackboards, of forming a circle for a game, to secure ease, quietness, speed, etc.

II. Playground Games:

	Education by Plays and Games	*Graded Games*
Pussy Wants a Corner	p. 100	p. 29
Cat and Mouse	p. 100	p. 29
Mulberry Bush	p. 136	p. 21
Muffin Man		p. 11
Drop the Handkerchief	p. 101	p. 8
Looby Loo	p. 135	p. 10
Farmer in the Dell	p. 137	p. 9
Blind Man's Buff	p. 122	p. 52
Round and Round the Village	p. 136	p. 39
Hide and Seek	p. 100	
Knots in May		p. 64

The directions for playing are given in detail in the books indicated and will not be presented here. Other games may be used instead of these if simple ones are selected. One game a month is adequate; not so many games, but the few well played, the aim. Teach the words carefully and in all running games insist upon the orchestra to accompany the players. Teach the game first as an indoor game; then apply to outdoor activity.

III. Schoolroom Plays:

1. Sense Games.

a. Sight. Hide the Thimble. *Graded Games*, pp. 7, 51.

Children lay their heads on their desks, or they may leave the room, while one hides the thimble or ball.

Devise other games with nature objects, colored paper, cubes. Air drawing of surfaces, as square, circle.

b. Sound. Blind Man's Buff. Locate the person in center by the movement. *Graded Games*, p. 52.

Devise exercises in speaking, in singing to train the ear. Send a child into the hall who may speak or sing. Let the class guess the singer. Place the singer behind the child who is blindfolded.

c. Touch. Use fruits, flowers, leaves, nuts, objects. Place the object in the hands of the child who is blindfolded. Test his sense of form.

d. Taste. Train children to recognize sweet, sour, bitter, pungent.

e. Smell. Train children to recognize odors of a few flowers.

2. Imaginative and imitative games.

a. Imitative activities suggested by the other lesson material, as gathering leaves, swaying trees, a butterfly flying, birds flying, soldier boy marching, horses stepping high, a rabbit leaping, squirrel running, and others. Work for accuracy in the interpretation which should be worked out by the children themselves, taking the best as the model for imitation. Make this work worth while. Keep in mind the definite purpose of poise and control, and aim to exercise arms, legs, body, head, and co-ordinate the breathing exercises with them.

b. Follow the Leader. *Graded Games*, pp. 2, 17, 21. The children represent the activities of which they sing while marching or standing in the aisles. They sing to the tune of "Here We Go Round the Mulberry Bush," as, "This is the way we all will walk, all will walk, etc."

c. "Did You Ever See a Lassie?" "When I was a Shoemaker." *Graded Games*, p. 3. The children stand in the aisles. One takes his place before the class, and at the proper time goes through the motion which the children imitate in rhythm of the song.

d. The King of France. Soldier Boy. *Graded Games*, pp. 4, 5, 6. Make paper caps for occasional use, as a bit of costuming adds interest.

3. Games for general activity.

a. I say "Stoop." *Graded Games*, p. 34. The teacher says to the class "I say Stoop." Both teacher and children stoop at the command. Repeat the command several times. The teacher says, "I say Stand," and stoops. Any child moving on the word "stand" is caught and takes his place. Continue until several have been caught.

b. Running. *Graded Games*, p. 15. All the children run together, or only a few at a time. Run lightly around the room up and down the aisles, running on toes, lifting knees high. At each step use arms in various movements, e. g. [1] Run as if on soft grass, [2] Run as if through fallen leaves, [3] Still running in place without advancing. [4] Change time from slow to fast. [5] Imitate birds flying.

c. Squirrel game. *Graded Games*, p. 7. Tests child's alertness and control in running lightly about the circle or in and out among the desks.

d. Jumping. *Graded Games*, pp. 16, 99. [1] Crossing the Brook. Imaginary stones on floor. Children step from stone to stone. [2] Jack Be Nimble. Place a candle—a box or cube—

in front of alternating rows. The children in two rows form a company one facing the rear of the room. As each child comes forward he jumps and passes on following the children of the second row. Many other games are suggested in reference books and teacher and children can invent games which correlate with the daily work.

IV. Rhythmic Exercises:

1. Finger plays and song plays: Simple singing games repeated from the kindergarten are suited to children of this grade. Among these, selections from the Finger Plays by Emilie Poulsson should be used freely at rest periods during the day. The following are suggested: "Merry Little Men," "Squirrel," "The Beehive," "The Corn," "Mrs. Pussy," "Making Butter," "Santa Claus." Also "The Pigeons," "The Postman," "The Birds' Nest," and others, found in *Songs of the Child World* by Riley and Gaynor, and the Bentley *Primer*.

2. Folk dances, and traditional games:
   a. Farmer in the Dell. Graded Games, p. 9.
   b. Looby Loo. Graded Games, p. 10.
   c. Here We Go Round the Mulberry Bush. Graded Games, p. 21.
   d. See Saw, Marjorie Daw. See Directions for Playing.
   e. Hickory, Dickory, Dock. See Directions for Playing.
   f. Ride a Cock Horse. See Directions for Playing.
   g. Flower Ring. See Second Grade.

HICKORY, DICKORY, DOCK.—Dance

"Hickory, dickory, dock;
The mouse ran up the clock;
The clock struck 'One;'
The mouse ran down:
Hickory, dickory, dock."

Children form a circle facing the center. They raise their arms upward to a vertical position on the words, "Hickory, Dickory, Dock," sway from the waist toward right, then left, then right. Coming to erect position they tuck the backs of fingers against waist.

When singing the second line the children take three creeping steps forward to center of circle, then stand still and listen while singing "The clock struck One," clapping hands on the word "One."

While singing the fourth line, take short running steps backward, with fingers tucked in at waist. While singing the last line repeat swaying movement with arms vertical.

Clasping hands take three steps toward the right and on the fourth count unclasp hands, turn to outside, reclasp hands and continue walking without breaking rhythm. Repeat, turning in or out to end of music.

SEE SAW, MARJORY DAW

Partners form a double circle facing each other. Take hands and place right foot forward.

"See Saw, Marjory Daw,
Johnny shall have a new master,
He shall have but a penny a day
Because he can't work any faster."

While singing the first two lines, sway in toward the middle of the circle so that one partner sways backward, bending left knee, and other partner sways forward, bending right knee. Then sway away from the center of the circle, each partner bending the opposite knee. Continue the movement eight times.

While singing "He shall have" all step to the right, crossing the left toe in front and shaking the left forefinger. Repeat in opposite direction while singing "but a penny a day."

While singing the last line partners join hands and swing each other in a circle with four skipping steps.

RIDE A COCK HORSE

Partners form a single circle facing in line of direction. The one in back places hands on partner's shoulders; the one in front places hands on hips.

"Ride a Cock Horse
To Banbury Cross
To see an old lady
Ride on a white horse;
With rings on her fingers,
And bells on her toes,
She shall have music
Wherever she goes."

While singing the first four lines all gallop eight steps around circle by placing the right foot forward and bringing the left foot up to the right with a hop.

Immediately face center of circle and extend arms vertically upward. Jump up lightly on the toes on the words "rings" and "fingers" and at the same time shake fingers.

Quickly place backs of hands on hips. While singing the word "bells," hop on the left foot and touch right toe in front, then on the word "toes," hop replacing right foot and touching left toe in front.

Take four skipping steps, swinging partner and coming back to place, while singing the last two lines.

3. Marching. Arrange children according to height. Keeping time in place. Accenting the time. Single file around room; marking time; halting. Change from slow to fast time, and observe that each child keeps step. Measure distance. March forward and backward in aisles, as in "King of France." Play "Soldier Boy." "Ten Little Indians." *Graded Games*, pp. 4, 5, 6.

4 Steps. Skipping. Use the "Skipping Game."

V. Health Lessons:

Cleanliness. Emphasize the necessity for clean hands and face, and for washing the mouth after mealtime.

Talk with children in most informal fashion. Opportunities will be found in the daily inspection of hands, face, after playtime, and in the study of the social and industrial life such questions as the following will arise:

1. How mother gets children ready for school; bathing, dressing, care of ears, of hands, etc. What the children do for themselves, washing face and hands, caring for teeth, etc.

2. Why mother works so hard to keep our clothing clean and fresh. How little children can help.

3. Why mother airs the rooms; by opening windows; airing bedding, etc.
Fresh air in the school room.

4. How to keep our desks and floor space clean: Why use door mat to keep street dust from our rooms?

5. What to do with our handkerchiefs.

6. Why fruit should be washed before eating. Gentle and careful manners in eating. Dangers of the common drinking cup. Teach the making of the simple paper cup.

Through mothers' meetings, where it is necessary, the mothers should be interested in the necessity for keeping the children's bodies and teeth clean, and in giving them simple and wholesome food, plenty of sleep, and opportunity for fresh air and sunshine.

SECOND GRADE

The work of the second year does not differ materially from the first since the children have still the same interests, but the increased mental grasp, and co-ordination of muscles securing better self-control gives opportunity now to perfect the former results. The games, rhythmic exercises, drills, of the first year may be repeated as requests are made by children, and new games added for variety and interest. Much attention should be devoted to the formation of correct habits of sitting, standing, walking, talking, using attractive means to attain alertness, poise, and self-control. In singing games, words should be carefully taught, enunciation as well as tone kept clear and sweet. The class should be divided into the orchestra and the players. When the physical exercise is strenuous, as in running, or marching, emphasis should be placed upon accuracy of movement, readiness of response to commands, and joyous interpretation. A teacher needs to be cheerful in her presentation, and exercises used throughout the day to interpret other school activities afford opportunity for rest and relaxation, and at the same time promote an atmosphere in which good will, loyalty, co-operation, and respect for law and order develop spontaneously.

Rhythmic work, consisting of folk dancing, and marching, are most effective means, because children love rhythm whether in song, poem, or game, and at this age they respond to it naturally. This is the time to cultivate the rhythmic sense, and strengthen the observational powers, and secure that automatic response which develops ease, naturalness, and grace of body.

Playground games of the previous year are repeated. Many of these may also be used as indoor games. The following outline suggests the lines of work for the year with which a teacher should be familiar. The work is arranged according to seasonal activities and sequence of difficulty, and enough is presented to afford an opportunity for choice according to the needs of the class.

Choose two games: One folk dance, and one step in marching for each month. Work with these new elements until accuracy, ease, uniformity of response, coupled always with joyousness, has been attained. Health talks will be given in informal fashion, establishing habits of neatness, and order through daily inspection and attending comment, and in the study of social and industrial life. This is the habit forming stage. Establish habits through cheerful doing.

Time allotment: 15 minutes per day. 75 minutes per week.

I. Posture Drills.

1. Sitting. At rest. Secure good posture. Sit well back in the seat, hands in lap, feet on floor.

2. Standing. Secure good posture. Ease of movement in rising. Stand clear of desk. Drill on ease and quietness of movement.

3. Recitation.

a. Sitting. Sit with back away from seat at active attention. Secure natural ease and economy of movement.

b. Standing, as in reading. Head up, chest high, good breathing, book held in left hand, right hand free, facing audience.

4. Writing. Both arms on desk, paper at slight slant, loose grip on pencil, head well up.

5. Breathing. Inhale, exhale facing open windows. Use arm movement, head movements, and body movements, and body movements freely in these exercises.

6. Give definite drills in passing to and from blackboards; in forming a circle for a game; in marching. Assign definite places until automatic response is habitual by which ease, quietness and economy of efforts are gained.

7. Dismissal. Devise a plan by which economy of time and movement are accomplished. Few commands, given by signals or words from black boards.

A three minute daily drill will secure the desired result. As often as possible devise an imaginative play which will add an element of pleasure to what otherwise is mechanical and uninteresting. See Stoneroad: *Story Gymnastics* for suggestions.

II. Playground Games.

	Graded Games	*Education by Plays and Games*
Pussy Wants a Corner		p. 100
Cat and Mouse	p. 29	p. 100
Mulberry Bush	p. 21	p. 136
Muffin Man	p. 11	
Drop the Handkerchief	pp. 8, 26	p. 101
Looby Loo	p. 10	p. 135
Farmer in the Dell	p. 9	p. 137
Blind Man's Buff	p. 52	p. 122
Round and Round the Village	p. 39	p. 136
Hide and Seek		p. 100
Slap Jack	p. 31	
Charlie Over the Water	p. 14	p. 113
Rolling Hoops	pp. 74, 96	p. 106

The directions for playing these games are given in detail in the books indicated above and will not be presented here. One game may be emphasized each month and though listed as an out-door game may be played in-doors as well. A teacher should play out-doors with the children as often as possible for purposes of adding pleasure as well as to note results in unsupervised play.

III. Schoolroom Plays.

1. Sense games.

a. Sight, hearing and re-action. "Have You Seen My Sheep?" *Graded Games*, p. 23. Children in seats. One child walks around the room, touches some one on the shoulder and says, "Have you seen my sheep?" to which the child replies by describing the dress of a third child who, upon recognizing his own description runs around the room and tries to regain his place before the questioner can tag him. If the child is tagged he becomes the "shepherd."

b. Sight and control. "Hide the Stone." *Graded Games*, p. 7.

A stone or any object may be used. While the class cover their eyes the stone is hidden by one player where it can be seen without moving anything. The class go by rows to hunt. If a child sees it he lets no one know it, but moves to the other side of the room as if still looking, and then goes to his seat. The first one to be seated is the winner. It may also be played by

having only one child as the hunter who is guided in his hunt by the class singing. As he approaches the object of his search the music grows louder, away from it, softer.

c. Hearing. "Jacob and Rachel." *Graded Games*, p. 24.

An old game, but excellent in training children to step softly and to elude the pursuer.

Echo. [1] Song Birds. [2] A Musical Top. Each of these may be used to train children to recognize voices, musical tones. Children cover their eyes while one child selected by the teacher steps into the cloak room, and sings a phrase from a familiar song. The one guessing correctly may choose some one to leave the room. A musical top may be played as a circle game. One child enters the center, is blindfolded, and as the children move about one is chosen to step behind her and sing a song. Guessing correctly, she returns to the ring.

d. Touch, Taste and Smell. Devise exercises similar to those suggested in first grade. Many occasions will arise in connection with nature study and industrial arts.

REFERENCES: Johnson, *Education by Plays and Games*; *Graded Games*, pp. 23, 24

2. Imitative and Imaginative Games:
   a. Follow the Leader. *Graded Games*, pp. 2, 17, 21, 34.
   b. Did you Ever See a Lassie? *Graded Games*, p. 3.
   c. Simon Says, "Thumbs Up."
   d. Grand Mufti. *Graded Games*, p. 22.

3. Games for General Activity.

a. Relay Race. *Graded Games*, pp. 27, 28. Bean Bags, potatoes or other objects may be used. Place on front desk. At a given signal the children in the front seats take one object at a time and carry to back desk. Then from back desk to the front again. The children in second seats continue, and so on. Secure competition in lightness of running, and accuracy of placing objects rather than speed.

b. Hopping Race. *Graded Games*, p. 29.

c. Squirrel in the Trees. *Graded Games*, p. 7.

d. Garden Scamp. *Graded Games*, p. 31.

e. Bean Bag or Ball in Pass Ball. *Graded Games*, p. 32.

The class arranged in a circle. A bean bag or ball is passed around as rapidly as possible. Any child failing to catch the bag must drop out of the game. The bag may also be passed over the head to the child in the rear.

f. Wood Tag. *Graded Games*, p. 33.

4. Games for Mental Activity.

a. Beast, Bird, or Fish. *Education by Plays and Games*, p. 126.

b. Arithmetic Games. *Education by Plays and Games*, pp. 140–145.

c. Nature Games. *Education by Plays and Games*, pp. 145–146.

d. Language, Reading, Spelling Games. *Education by Plays and Games*, pp. 150–154.

IV. Rhythmic Exercises:

1. Finger Plays and Singing Games.

Add to the first grade list: "The Milker," "The Baker," "The Little Boy's Walk." From Emilie Poulsson's *Finger Plays*.

2. Folk Dances and Traditional Games.

a. I See You. Burchenal: *Folk Dances and Singing Games*, p. 16.

b. Lads and Lassies. *Graded Games*, pp. 27, 84.

c. One, Two, Three, Bow. *Graded Games*, p. 75.

d. See Saw. *Graded Games*, pp. 13, 69, 96.

e. The Swing. *Graded Games*, pp. 73, 82, 97.

f. Grandmother Game. See Directions for Playing.

g. Flower Ring. See the following directions for playing some of the games.

Directions for Playing Games

Grandmother Game

I will teach you how to sing
As my grandma used to do.
I will teach you how to dance
As my grandma used to do.
Tra, la, la, la, la, la, la,
Tra, la, la, la, la, la, la,
Tra, la, la, la, la, la, la,
I will make a bow to you
As my grandma used to do.

Directions for playing the Grandmother Game on the playground.

1. Children form a double ring facing each other, boys in outside circle, girls in inner circle. Girls hold skirts in hands, boys have arms folded on chests. Partners look at each other and cross feet first to left and then to right in time to music as they sing, "I will teach you, etc.," to "As my grandma used to do."

2. Partners or opposite children clasp their right hands, raise them high, while left hands are firmly placed on hips. Dance to left on first line of "Tra, la, la, etc.," to right on second line, to left on third line, and to right on fourth line.

3. Partners unclasp hands, girls grasp skirts, boys fold arms on chests; then bow to each other, girls placing right foot forward the left back and courtesying, while boys place feet together and bend from waist as they sing, "I will make a bow to you." Partners again clasp right hands, raise them high, then change places in the circles, and bow again as before, as they sing, "As my grandma used to do."

When playing "Grandmother Game" in the class-room where single seats are used, alternate rows face each other, and dance up and down the aisles instead of in a circle. When so played, children must turn around themselves, instead of changing places as is done in the ring, when singing, "As my grandma used to do."

FLOWER RING

Give to each row of children the name of a common flower as "violet," daisy," etc. They form a ring around the room, join hands, and as they walk or skip, sing the following verse:

"We children form a flower ring,
And in a circle dance and sing.
Not one of us goes in or out
Only the daisies turn about."

(Tune: Smith *Primer*, p. 100.)

Those children whose names are called in the song, turn around and face the outside of the ring. The play is continued until all have turned, facing the outside of the ring. The next verse is sung, ending with the words:

"Not one of us goes in or out
But the whole circle turns about."

On the word "turns," all turn and face in again.

3. Marching.

a. Single file, children arranged according to height. Marking time, halting, accenting the time; changing from slow to fast time; running step, lightly on toes; reversing; introduction arm movements. Use "King of France," "Ten Little Indians."

b. Marching by twos, with long steps, slow music, with short steps, quick music; with tiptoe, light music. March and bowing as partners meet. Aim for a light, free movement, without dragging or scuffing of feet, arms free except when used in some concerted movement.

4. Steps.

a. Skipping by ones, by twos, to music.
b. Heel. March on heels.
c. Toe. March on toes.
d. Heel and toe. *Graded Games* p. 78.
e. Waltz step as used in the Swing. *Graded Games*, p. 73. Children in a circle, with hands joined. Run forward lightly three steps. Run backward lightly, three steps.

V. Health Lessons:

1. Emphasis on the care of the teeth, the danger of the common drinking cup, and in putting pencils and other things used in common, into the mouth.

2. Cleanliness of person, of desk space, of schoolroom, of food.

3. Inspection of children's hands and faces after strenuous play on the playground should be made daily. At luncheon-time habits of neatness and careful and gentle manners should be instilled. Informal discussions will arise in connection with the study of social and industrial life, and such problems as the following may be given:

4. Why we should chew our food well. Eat slowly. Pass cups by the handle. Why wash our hands before eating. How to clean our teeth. Why keep our desk

space clean. Why have fresh air in the room every hour. Why have sunlight and air in our homes. Why rugs are the best floor covering. Why keep our feet dry and warm. Why have comfortable shoes. How to keep city streets clean.

THIRD GRADE

Children are beginning to realize their ability to accomplish things and their desire to see practical results makes it possible to emphasize technique. They will co-operate to secure enough skill in the attainment of certain ends when the motive for such drill arises out of their own childish experiences. The spirit of competition is developing and should be used to worthy ends.

Simple gymnastic exercises growing out of some other problem, such as a folk dance, or other rhythmic work should be emphasized in this grade. Still keep alive the play spirit in presentation, but work for exactness and accuracy in the concerted movement of the whole group. Aim to present daily a cycle of movements which include breathing, arm, leg, trunk, head and hand exercises. Variations and recognition of sequence are needed to stimulate precision and energy in execution. Waste no time between exercises. Do no unnecessary talking and give individual criticisms quietly. Maintain a cheerful, quiet manner.

Rhythmic exercises based upon imaginative and imitative plays are continued, giving the children an opportunity for interpretation of ideas through bodily rhythms. Folk dances and marching together with simple steps develop ease and grace of movement, and train boys and girls in courtesy which makes for refinement.

Games for indoor and outdoor play are suggested and the teacher should frequently participate in the outdoor games for the purpose of giving added pleasure to the children as well as to supervise their play and help them to establish right ideals of the game and true sportsmanship. Many games which test skill should be given. This is the time when children like to run races of short distances, use hoops, and jump rope. Relay races, hoop rolling contests, jumping rope, marble games are competitive and need to be regulated under the sympathetic guidance of the teacher. Train children to exercise judgment upon the qualities of alertness, skill, poise, courtesy.

Some apparatus should be provided for outdoor play in addition to the swings, balancing log, see-saws for younger children. Climbing poles, tether ball, giant stride, and means for high jumping may be used.

Provide quiet games for indoors on rainy days, such as dominoes, fox and geese, fish pond, word games, guessing games of various kinds, bean bags and ball.

Health talks emphasizing cleanliness of person and surroundings will be given informally in connection with daily inspection and as the occasions arise in other lessons.

Choose two games; one folk dance, and one step in marching for each month. Work with these new elements until accuracy, ease, uniformity of response, coupled always with joyousness, has been attained. This is the habit forming stage. Establish habits through cheerful doing.

Time allotment: 15 minutes per day. 75 minutes per week.

I. Posture Drills:

1. Sitting. At rest. Secure good posture. Sit well back in the seat, hands in lap, feet on floor.

2. Standing. Secure good posture. Ease of movement in rising. Stand clear of desk. Drill on ease and quietness of movement.

3. Recitation.

a. Sitting. Sit with back away from seat at active attention. Secure natural ease and economy of movement.

b. Standing, as in reading. Head up, chest high, good breathing, book held in left hand, right hand free, facing audience.

4. Writing. Both arms on desk, paper at slight slant, loose grip on pencil, head well up.

5. Breathing. Inhale, exhale facing open windows. Use arm movements, head movements, and body movements freely in these exercises.

6. Give definite drills in passing to and from blackboards, in forming a circle for a game, in marching. Assign definite places until automatic response is habitual by which ease, quietness and economy of efforts are gained.

7. Dismissal. Devise a plan by which economy of time and movement are accomplished. Give few commands, by signals or words from blackboard. All pass in single file to cloak room without passing through other aisles.

A three minute daily drill will secure desired result. As often as possible devise an imaginative play which will add an element of pleasure to what otherwise is mechanical and uninteresting. See Stoneroad: *Story Gymnastics* for suggestions.

A Lesson Plan:

Simple gymnastic exercises which emphasize some element presented in the folk dance and rhythmic exercise, or given for purposes of relaxation, suggested by some familiar experience of subject-matter in other lessons.

1. Formation. Class may rise, take distance, and place, according to height. Secure good standing position, heels together, toes outward.
2. Breathing exercises. Inhale, exhale, facing open windows.
3. Arm and breathing exercise. Blowing in bag; wind swaying trees.
4. Arm and finger movements. Trees and leaves. Movement in "Bow Low."
5. Leg movement. High stepping horses; knee bending; skating, jumping jacks, see-saw.
6. Trunk exercise. Trees swayed by wind. Digging, sowing seed, rowing a boat, bowing.
7. Leg movement with steps; toe pointing, and other steps; running, skipping, jumping.
8. Resting, in seats in good sitting position.

II. Playground Games:

	Graded Games	*Education by plays and games*
Potato Race Relay	p. 27	p. 167
Throwing Bean Bag Overhead	p. 54	
Slap Jack	p. 19, 30	
Dodge Ball	p. 44	p. 172
Tag Ball	p. 47	p. 102
Oats, Peas, Beans and Barley	pp. 38, 93	
Jolly is the Miller	p. 40	
	Burchenal Folk Dances	
I See You	p. 16	

III. Schoolroom Plays:

1. Games of imitation:
   a. Follow the Leader.

   Used to give drill upon some gymnastic exercise, the leader chosen from the class.

   b. I Say Stoop. *Graded Games*, p. 34.
   c. Statues. *Graded Games*, p. 35.

2. Games for general activity:

a. Going to Jerusalem. *Graded Games*, p. 26. *Education by Plays and Games*, p. 106.

b. Token Tag. *Graded Games*, p. 43.

c. Relay Race. *Graded Games*, p. 27, 28. *Education by Plays and Games*, p. 167.

d. Bean Bag Overhead. *Graded Games*, p. 54.

3. Games for mental activity:

a. Arithmetic. "I am thinking of something." *Education by Plays and Games*, pp. 140, 145.

b. Language, reading, spelling. *Education by Plays and Games*, pp. 150–154.

c. Nature Plays. *Education by Plays and Games*, pp. 145–146.

IV. Rhythmic Exercises:

1. Marching.

Single and double file; turning square corners; marking time; halting; arm movements and simple leg movements introduced. From standstill, right face, left face; right about face; left about face.

2. Steps. Tap step; hop step; heel and toe; skipping; swing step; other steps needed in the folk dances; skipping.

3. Folk Dances:

a. Oats, Peas, Beans, and Barley Grow. *Graded Games*, pp. 38, 93.

b. I See You. Burchenal: *Folk Dances and Singing Games*, p. 16.

c. The First of May. Burchenal: *Folk Dances and Singing Games*, p. 18.

d. Jolly is the Miller. *Graded Games*, p. 23.

e. The Minuet. *Graded Games*, p. 72.

f. Bow Low.

g. How Do you Do, My Partner.

CLAP DANTZEN (BOW LOW)

Tra, la, la, la, la, la, la, la, la,
Tra, la, la: tra, la, la:
Tra, la, la, la, la, la, la, la, la,
Tra, la, la, la, la, la, la,
Bow low, clap three times,
Bow low, clap three times,
Tra, la, la, la, la, la, la, la, la,
Tra, la, la, la, la, la, la, la, la.

Directions for playing "Bow low" on the playground:

a. Children form a double ring, facing each other; opposite partners clasp right hands, raise them high, hips firm with left hands, look at each other, and dance to the right as they sing the first line, to left as second line is sung, to right for the third line and to the left for the fourth line..

b. As they sing "Bow low" the girls or inner circle have hands on hips and bend knees, while the outer circle or boys fold arms on chest, stand feet close and bend from waist. Children face each other, and clap three times with "Clap three times." Repeat for second "Bow low, clap three times."

c. When singing the seventh line "Tra, la, etc.," the children clap their own hands together on "tra," right hands together on "tra," right hands of opposite person on "la," their own hands together on second "la," left hands of partners on third "la," hands together on fourth "la," right hands on the fifth "la," together on sixth "la," left hands together on seventh "la," and together on the eighth "la." Right hands of opposite partners are clapped together on "Tra" of last line, each child turns himself around and claps three times as the "las," in last line are sung.

d. Repeat, "Bow low, clap three times," bowing and clapping as previously directed, but instead of clapping for "Tra, la, la," the children support their right elbows with left hand and shake right forefingers at opposite partners as they sing, "Tra, la, la, la, la," and change hands supporting left elbows, and shaking left forefingers at partners for the remaining four "las." During the singing of the last line, support right elbow in left hand, shake right forefinger *once* on "Tra," then turn around and clap three times as the eighth "las" are sung.

When played in class-room rows face, one row impersonating girls, the other boys. Dance up and down aisles instead of forming circles.

How Do You Do, My Partner

First and second rows as partners walk out and around the room followed by the third and fourth, then the fifth and sixth rows. When all are around the room they halt, face partners and sing:

"How d' you do, my partner?
How d' you do today?
Will you dance in a circle?
I will show you the way."

While singing the first line, all make a deep bow. On the second line, partners clasp right hands and shake. Keeping the right hands clasped, partners grasp left hands on the third line, then turn, facing in line of direction while singing the last line.

All skip forward around the room while repeating the tune with "la, la."

V. Health Lessons:

1. Cleanliness.
   a. Attention to the necessity for cleanliness of the body.
   b. Care of the hair, nails, mouth and teeth.
   c. Appearance of schoolroom, grounds, street, clean shoes, disposal of waste paper, fruit skins.
2. Fresh air and sunshine:
   a. Necessity for fresh air in schoolroom and in bedrooms; proper light in which to read; care of the eyes.

3. Food:
   a. How to eat.
   b. Suitable lunches.
   c. What not to eat.
4. Drinking.
   a. Use of drinking cups: value of much water.
   b. Value of no tea and coffee.
5. Sleep.
   a. Time to go to bed and for getting up.
6. Postures.
   a. Injury caused by incorrect posture and by tight clothing.
   b. Formation of correct habits of sitting and standing. Talks upon personal appearance should be infomal, and class pride stimulated by judicious criticism and praise. Simple problems can be given which will lead to the formation of right habits: as "How to Take Care of Our Hands," "How to Keep My Nails Clean," "What Tight Shoes Will Do to the Feet." "How to Brush My Teeth."

REFERENCES: Gulick, *Good Health; Emergencies.*

FOURTH GRADE

The work of this grade does not differ from that of the previous year save that even greater emphasis may be placed upon technique since this is primarily the period when drill does not seem irksome. The element of competition makes a strong appeal and should be wisely used in both indoor and outdoor games. There is a demand for tests of power and a wholesome pride in dfficulties overcome.

Familiar games may be varied slightly so as to add new features of increasing difficulty as the pupils become more skillful. Variations in gymnastic exercises are essential to add interest by which to secure the necessary precision and energy in execution which will bring physical benefit.

Daily exercises which include breathing, arm, leg, trunk, head and hand movements are continued and whenever possible related to some larger problem, as the folk dance or other rhythmic exercises, in preparation for some event. Motivation of physical exercises is essential to success. An outdoor program of play, or play festival is a desirable end to keep in view from the beginning of the year. Class contests and interschool contests should be arranged for at the close of school. For this reason, the aim of each exercise is clearly presented as a part of a larger whole which spurs the pupil to keener effort.

Folk dances and rhythmic work are continued, working for exactness and accuracy, securing that ease and bodily grace which develops poise and control. In out-door plays stress is placed upon games which test skill in control, in endurance, and speed. Games

involving running, jumping, skipping, are characteristic. Train pupils to exercise judgment with alertness, quiet control, and poise.

Play at recess periods should be compulsory, and out of doors when weather permits. The presence of the teacher participating in the games is always welcome and benefical. Emphasis should be placed upon fairness, honesty and generosity in the game until the play group disapproves instantly of all attempts by individuals to secure advantage to self at the expense of fair play.

Provision should be made for rainy days by having such games in the classroom as dominoes, checkers, parcheesi, fox and geese; geography, arithmetic, literature, and nature [usually card] games; and quiet, thinking games, such as riddles, guessing and charades.

Health lessons will be given incidentally as occasion arises in connection with nature study, geography or industrial arts. Habits established in previous grades are continued by vigilance on the part of the teacher, whose watchful care and example coupled with judicious criticism and praise develops a wholesome class pride in personal appearance, and responsibility toward neat and attractive surroundings.

Time allotment: 15 minutes per day. 75 minutes per week.

I. Posture Drills:

1. Sitting. Secure good posture. Sit well back in the seat, hands relaxed, usually in lap, feet on floor.

2. Standing. Secure good posture. Ease of movement in rising. Stand clear of desk. Drill on ease and quietness of movement.

3. Recitation.

a. Sitting. Sit with back away from seat at active attention. Secure natural ease and economy of movement.

b. Standing. As in reading. Head up, chest high, good breathing, book held in left hand, right hand free, facing audience.

4. Writing. Both arms on desk, well forward in the seat, paper at slight angle, penholder pointing over right shoulder.

5. Breathing. Inhale, exhale, facing open windows. Correlate with arm, head, trunk movements.

6. Give definite drills upon passing to and from blackboards, and for marching. Assign definite places until automatic response is habitual by which ease, quietness, and economy of effort are gained.

7. Dismissal. Devise a plan by which economy of time and movement are accomplished. Give few commands, by signals or words, preferably the former. All pass in single file to cloak room without passing through other aisles.

II. Calisthenics:

1. Emphasize some element selected from the folk dance or the rhythmic exercise by further drill to improve technique. Always help the pupil to recognize the purpose or need to stimulate enjoyment in the acquisition of accurate response control.

2. Develop a cycle of exercise for daily practice which includes breathing, arm, leg and trunk movements using two-count exercises; four-count exercises; relating two parts of the body in alternation; relating two parts of the body in combination. Vary the presentation and present a sequence in difficulty.

3. Lesson Plan for three minute daily drills:

a. Formation. Class rise, take distance, and place according to height. Pupils should usually be seated according to height. Secure good standing position; heels together, toes turned outward.

b. Breathing exercise. Inhale, exhale, facing open windows.

c. Arm and breathing exercise.

d. Arm and finger movement.

e. Leg movements.

f. Trunk exercise.

g. Leg movements, with steps.

h. Head movements.

i. Resting, in seats in good sitting position.

Emphasize each phase in separate lessons with variations until automatic vigorous response has been attained.

REFERENCE: Stoneroad, *Story Gymnastics.*

III. Playground Games:

Potato Race Relay. *Graded Games,* p. 57.
Throwing Bean Bag Overhead. *Graded Games,* p. 54.
Exchange Tag. *Graded Games,* p. 48.
Roll Ball. *Graded Games,* p. 60.
Three Deep. *Education by Plays and Games,* p. 166.
I See You. Burchenal: *Folk Dances and Singing Games,* p. 16.
Stealing Sticks. *Education by Plays and Games,* p. 103.
Dodge Ball. *Education by Plays and Games,* p. 172.
Center Base. *Graded Games,* p. 55.
Steeple Chase. *Graded Games,* p. 58.
Run, Sheep, Run. *Graded Games,* p. 59.
Knots in May. *Graded Games,* p. 64.

IV. Schoolroom Plays:

1. Games of Imitation.

Grand Mufti. *Graded Games,* p. 22.

Still Pond, No More Moving. *Graded Games*, p. 53.

2. Folk Dances.

Chimes of Dunkirk. *Graded Games*, p. 105.

Carousel. Burchenal: *Folk Dances and Singing Games*, p. 20.

Klap Dansen. Burchenal: *Folk Dances and Singing Games*, p. 34.

Bow Low. [See Third Grade.]

The Minuet. *Graded Games*, p. 72.

Knots in May. *Graded Games*, p. 64.

Hansel and Gretel Dance. Hofer: *Singing Games*, p. 40.

3. Marching.

Single and double file; four abreast; forming the wheel; forming arches, bowing to partner and skipping through figures, as circle within a circle; diagonals, parallels, spirals.

4. Steps.

Skipping; skating step; glide step; tap, heel and toe; hop step; gallop step. Variations of steps with additional arm and trunk movements.

V. Health Lessons:

1. Cleanliness.

a. Enforce habits suggested in preceding grades and add simple lessons on sweat pores, outer skin, and its care. Discuss necessity for frequent and regular bathing. Use of the handkerchief.

b. Care of teeth, with special reference to the relation between the temporary and permanent sets.

c. Care of the hair; combing, brushing, shampooing; arrangement.

d. Care of the nails. Discuss the best ways of keeping the nails in good condition.

e. Proper clothing. Care of clothes; personal appearance.

2. Cleanliness in the home and school; formation of habits of neatness; respect for school grounds and buildings.

3. Fresh air and sunshine.

a. Effect on plant life; on health of people.

b. Care of the eyes; effect of bad light; the proper and improper use of the eyes.

4. Injurious effects of cigarette smoking, gum chewing, and of other bad habits, such as spitting, exchanging apples and candy.

5. Talks upon First Aid to the Injured.

REFERENCES: Gulick, *Good Health; Emergencies.*

SUGGESTIONS FOR TEACHING PHYSICAL EDUCATION IN THE GRAMMAR GRADES*

FIFTH, SIXTH, SEVENTH, EIGHTH GRADES

I. Value of physical education in the daily curriculum:

There are three phases of life within each human being—the physical, mental, and moral—and each must be developed to make the perfect man. And yet it is surprising that we devote such an infinitesimal part of the school time to physical training.

"Is it not time for us to realize that the proper physical development of the child has to do not with fifteen or twenty minutes of gymnastic drill given five times a week, but with all the physical activities of each of the daily twenty-four hours of the week?"—Wm. A. Baldwin.

To increase a child's usefulness in the community through health and power by stimulating love and respect for his own body, and arousing his moral nature through a sense of law and justice that comes with a game is no small thing to lose from daily living, and this he must lose when no period is provided for physical training.

II. Essential characteristics of the years from 10–12 *in a child's life process:*

"In general there is a lessened rate of physical growth, particularly for boys, but rapid structural development; there is an apparent lull in the demands upon the system; it is the period of greatest immunity from disease, the specific intensity of life culminating in this period—at eleven to twelve in girls, and at twelve to thirteen in boys; the development of the special senses and their association is continuing; the co-ordination of muscular action and feeling seems to be the special import of this period in the nervous system; it is the time for the development of facility and skill; it is a period of great physical actvity; now comes the height of interest in running games. The element of co-operation in plays and games is developing, although the individual still remains prominent."—Johnson: *Education by Plays and Games.*

*Credit is due Miss Henrietta Armstrong of the Sparrows Point High School for arranging this outline and contributing much of the material for it, also to Miss Clara Dobbin, Principal of the Willow Avenue School, and to Miss Dena Aitcheson, Fullerton School, for contributions.

III. Play and the Public Athletic League Work:

VITAI LAMPADA
(Play the Game!)

There's a breathless hush in the Close tonight—
Ten to make and the match to win—
A bumping pitch and a blinding light,
An hour to play and the last man in.
And it's not for the sake of a ribboned coat,
Or the selfish hope of a season's fame,
But his Captain's hand on his shoulder smote
"Play up! Play up! and play the game!"

The sand of the desert is sodden red,—
Red with the wreck of a square that broke;—
The Gatling's jammed and the colonel dead
And the regiment blind with dust and smoke.
The river of death has brimmed his banks,
And England's far, and Honour a name,
But the voice of a schoolboy rallies the ranks,
"Play up! play up! and play the game!"

This is the word that year by year
While in her place the School is set
Everyone of her sons must hear,
And none that hears it dare forget.
This they all with a joyful mind
Bear through life like a torch in flame,
And falling, fling to the host behind—
"Play up! play up! and play the game!"

—HENRY NEWBOLT.

Through the good work of the director of the Public Athletic League in Maryland, Dr. Wm. Burdick the State Legislature [1918] showed that it was thoroughly cognizant of the principle of right living and good citizenship for it enacted a law that will give every boy and girl in the State and County the opportunity for the best kind of physical education. The law reads, in part:

1. Section 1. Be it enacted by the General Assembly of Maryland, that there shall be established and provided in all the Public Schools of this State and in all schools maintained or aided by this State physical education and training for pupils of both sexes during the following minimum periods: A. In the elementary public schools at least fifteen minutes in each school day and also at least one hour of directed play outside of regular class-room work in each school week. B. In Public High Schools at least one hour in each school week and also at least two hours of directed play or athletics for all pupils outside of regular classroom work in each school week.

Section 2. And be it enacted, that the State Board of Education upon recommendation of the State Superintendent of Schools shall appoint a Supervisor of Physical Education whose duty it shall be to direct and carry out the provisions of this act under the direction of the State Superintendent of Schools

. . . . . .

Section 3. And be it further enacted, That immediately after this appointment the Supervisor of Physical Education, under the direction of the State Superintendent of Schools, shall organize his work and shall formulate the necessary and proper plans, courses and regulations for carrying out the provisions of this Act which when approved by the State Board of Education shall be followed in providing physical education and training as required under section 1 of this act.

IV. Habit formation:

Work for correct posture, for correct breathing, and make sure that there is abundant fresh air to breathe. Dr. Luther Halsey Gulick says, "No child should be permitted to go through school, any more than through West Point, with a bad back. There is no excuse for it, unless the child is an actual cripple, and it is one of the greatest stigmas which can be laid upon us teachers that there are children leaving us who do not carry themselves properly, perhaps none greater than the way we carry ourselves," and Miss Alta Wiggins, director of physical education in the Buffalo schools, adds: "The teacher of every grade has a fine opportunity during the first month of school to give pupils a good start in the formation of correct school habits before they begin to form incorrect ones. It is not too soon the first day to insist that all sit up in a proud, strong way; that all stand with straight knees, crown of the head high, neck touching the back of the collar, and to walk about with light, elastic step. These habits are not developed by much talking on the part of her teacher, but through her example, showing that she persistently keeps herself up to the standard which she has set for those under her care. Often a kind glance, a lifting of the head, a little greater effort at arching the chest forward, or some other significant gesture of the teacher, accomplishes more than any amount of talking."

V. General points in subject-matter and method:

Physical development is an essential and important part of education, and is especially helpful to students who are doing much mental work. Hence it is necessary to give those physical exercises that are beneficial to the body and which in return develop rhythm, control, grace, and co-ordination.

It has been found that a certain type of physical work instead of being a help, has been a hindrance; the stiff, jerky movements devoid of grace and rhythm only produce rigid bodies; stiffness and rigidity are antagonistic to intellectuality. The development of an elastic frame should be the aim of all physical teachers, and the first step must necessarily be to get the body elastic. The flexibility of body and the control of masterly, graceful and purposeful movements should be made the basis of all physical education. Efficiency of movement attains the maximum result with the minimum amount of exertion. This is the outcome of continuous and intelligent practice.

The first step in learning a muscular movement is to get a clear idea of the movement. The teacher who gives this clear idea, must have a clear idea herself, and must also be able to perform the movement accurately. If clothing or some physical disability makes it impossible for the teacher to do this, a chart of pictures can be used, or one of the more advanced pupils can serve as a model. Wording and speaking of commands must be such as will secure exact unison in the work of the class. The command must leave no doubt whatever as to *what* is to be done, *how* it is to be done, *when* it is to be done. The tone of the voice in which commands are spoken is *very* important. Speak as if interested, enthusiastic, and confident.

Outline of Work

I. Subject-matter:

1. Forms of activity should be selected that will function in rendering the future life more efficient; this will be accomplished by—

   a. Affording opportunity for the development of social and moral values, such as group activity, loyalty, honesty, etc.

   b. By relieving the individual of the element of inactive and fine co-ordination which prevails in the academic classroom studies.

   c. By increasing the strength of the heart, lungs, and muscles, sufficient for the needs of the individual.

   d. Inhibiting unskillful co-ordination and bad postures through training in skillful co-ordination and good postures that are the types of those to be used in life.

2. These forms of activity should be correlated with the present interests of the individual.

3. These forms of activity should express an idea, feeling or emotion, or should be performed with reference to some objective aim.

II. Organization of subject-matter:

1. Forms of activity should consider the age and health of the individual.

2. They should consider the sex after the sixth grade.

3. They should consider the development of the child as an individual with reference to the accessory muscles, and also with reference to the development of puberty.

4. They should be developed from the simple to the complex. Coarse, rapid work should come before highly co-ordinated work.

III. Kinds of exercises:

1. Hygienic.
2. Recreative.
3. Educational.

IV. Hygienic exercises:

1. Open windows *during* exercise.
2. Precede the day's lesson by deliberate deep breathing:
   a. Standing feet apart; clear nostrils by use of handkerchiefs.
   b. Breathe in through right side of nose closing left; hand lowered slowly, breathe out; repeat two or three times.

   Breathe in through left side of nose, closing right; hand lowered slowly breathe out; repeat two or three times.
   c. Both hands down at side, breathe in and out.
   d. Feet together, breathe through both nostrils, in—out.
   e. Deep breath, press (drawing in abdomen); relax; breathe out.
3. Work for correct standing and sitting positions:

   Fundamental standing positions:
   a. Feet together.
   b. Knees straight.
   c. Work up to body.
   d. Head erect.
   e. Eyes to the front.
   f. Shoulders down.
   g. Arms quite loose.
4. As a posture exercise, fundamental standing position aims to do three things:
   a. To strengthen muscles used in holding good posture.
   b. To stretch some tissues and control others, so as to correct the effects of bad posture.
   c. To train the muscular sense and proper nerve centers so that correct posture will be taken.

   This exercise should be given before and after each lesson.

   As bad postures are apt to be most common in the seventh and eighth grades, we should work for correct posture from first grade to the eighth.
5. "In place! Rest!—"

   Move right foot one foot length to rear, and assume an easy posture without leaving floor position.

   Purpose.—To cultivate normal posture and serve as a starting position for other exercises.

   (The class *should always be at rest* during explanation.)

V. Order of exercises:

When time given to gymnastics is short and the work is done in the class room, it is often best to attempt little more than posture, a few rhythmical, and some aesthetic arm and leg movements, always planning to provide more vigorous exercises at other times in the form of plays and games.

1. *Introductory exercises:* order movements, facings, simple arm and feet position, and opening order are good examples of order movements. We may call any new movement an order movement.

2. *Leg movements:* these exercises are intended to give the general effect known as "warming up;" which includes a slight rise in the temperature of the body, moderate increase of the heart action and breathing, and sending more blood to the muscles. The heat that causes the warming up arises from the chemical action that takes place in the muscles during exercise. Since we wish a large amount of chemical change without fatigue, we choose exercises that employ the larger muscles in the body rather than the smaller ones. Marching, heel raising, running and other movements where the lower limbs lift the entire body make the best movements for this group.

3. *Arch flexions:* these are backward bending of the neck and upper portion of the spinal column, taken with the object of correcting round shoulders. This fault of posture so common among school children, always flattens the upper part of the chest and lessens the range of the breathing movements and so diminishes the capacity of the lungs. By the practice of arch flexions the muscles supporting the chest are developed and also those that hold the spinal column erect. The tissues across the front of the chest and shoulders are stretched at the same time, making it gradually easier for the person to hold normal posture and to breathe deeply—

a. Head bending backward with support of back of school seat.
b. Head bending backward from preliminary standing position.
c. Holding head backward while taking arm movements.
d. Trunk bending backward with support by pupils.
e. Arms upward, head dropped on chest—raise head to counts of three.

4. *Heave movements:* heave movements are movements of the arms that help to expand the chest. Typical heave movements sometimes called the true heave movements are those in which the body, is suspended by the arms, as in climbing, swinging on rings, etc.

Large muscles passing from the chest to the upper arm are used in these movements exerting an upward pull on the ribs, and thus enlarging the chest.

Since these "suspension" exercises are too severe for some pupils and as apparatus is not always provided—milder arm movements having a similar effect are used: arm-raising, arm stretching, neck firm, etc., are examples.

5. *Balance movements:* These are for general improvement of posture and cultivation of ability to maintain the balance under difficulties.

a. Heel raising.
b. Leg raising (this should be taken right and left in alternation).
c. Knee bendings.
d. Knee raising.
e. Marching on balance movements.
f. Poising on toe of one foot.

6. *Back exercises:* in order to cultivate control of the posture of the trunk and to develop and train the back muscles to hold the trunk properly, we used positions in which the trunk inclines so as to throw the weight of the upper part of the body on the back muscles.—

a. Trunk forward and downward with easy arm positions.
b. Fall out, arms forward.
c. Fall out, arms outward.

7. *Abdominal exercises:* the purpose of abdominal exercises is to cultivate the ability to maintain good posture of the trunk, to strengthen the abdominal muscles, and to stimulate the digestive organs.—

a. The trunk is to be held in normal position in all the exercises which aid in promoting good postures.

b. Incline backward from sitting position.

c. Stride forward.

d. Kneeling position or half kneeling position. (Kneeling position—incline backward from knees, 45 degrees.)

e. Leaning forward and supporting the weight of the body on the hands and feet.

Leaning position with hands on top of desks—pupils standing in aisles of school room.

f. Raising knees; hang from the hands.

8. *Lateral trunk exercises:* these are movements in which we bend the trunk laterally, twist it, or incline it sideward for the purpose of increasing the mobility of the spinal column, improving the posture of the trunk and stimulating the abdominal organs.

A peculiarity should be noticed in the use of stride sideward as a starting point for side bendings. It is the easiest position for beginners to learn side bending, since it gives a wide base of support.

9. *Running and Jumping:* Here is the climax of the lesson. The work should be the strongest and most difficult of all.

Games when space permits are useful: running, jumping, and more vigorous fancy steps are the exercises most used.

VI. Recreational and relaxation exercises:

The play impulses of children have one all-important office, that of giving rise to habits and permanent interests. There is a time when boys love and must learn to play ball, and other team games, or be deficient in such sports.

There is a time when the habit of activity, that is, the habit of work and of enjoyment, is formed; and its opportunity lies in beginning the right connection between play and work *at the right time*. The ages 10–12 years mark the right time for beginning team work.

GAMES AND PLAYS

Outdoor

Three deep.
Relay race.
Potato race.
Center base.
Hopping base.
Obstacle race. (7–8 grades.)
Dodge ball.
Quoits (rope).
15 to 50-yard dash.
Standing broad jump.
Hare and hound.
Basket ball throw for distance (6th grade).
Basket ball as goal for skill (7th grade). 15 to 50 yard dash.

Jump rope race.
Rolling hoop race.
Relay race.
Tag game.
Passing ball relay.
Prisoner's base.

Indoor

Tuba Taba—bean bag.
Ten pins.
Ring toss.
Catch ball.
Circle ball.
Balloon ball.
House hiring.
Sail ship.
Feather games.
Continued stories.
Famous men.
Famous women.
Serpentine race.
Tag games.
Pass games.

A short basket ball game (5 min.) (8th grade.)

NOTE: For other games consult Johnson, *Education by Plays and Games* and the course of study for the Washington (D. C.) Elementary Schools.

VII. Apparatus Exercises:

1. Hand apparatus:

(There should be no parallel bar work for the girls; their arms are smaller than boys' arms and the strain is too great).

a. Dumb bells (after the fourth grade), ½ lb.; for boys and girls.
b. Hoops—for girls.
c. Wands—for girls and boys.

NOTE: Instead of giving a great variety of exercises to create interest, much time is gained by giving a drill or a dance with the hand apparatus, and perfecting it.

VIII. Rhythm:

Rhythm is the breaking up of a composition of music, or design in art into its patterns or units:

1. Marching.
2. Arm raising.
3. Leg raising.
4. Single points and double points.
5. Arm and leg movements together.
6. Aesthetic movements.
   a. Dance.
   b. Folk.

IX. Dances: (*a*) *Aesthetic exercises:*

Dances make the children think more clearly and quickly; develop good comradeship and create happiness and pure joy.

Dancing develops the muscles, making them long, firm, and graceful, while athletics tend to develop them round and hard.

To be able to execute the dance movement one must feel the rhythm. The figures and the steps are better described than the real essence, atmosphere or spirit which gives so much pleasure.

(*b*) *List of Folk Dances by Grades:*

Grade 5. Sailors' Dance.
Reap the Flax.
Highland Fling.
Cornish May Dance.
Chimes of Dunkirk.

Grade 6. Ribbon Dance.
Oxdansen.
Gathering Peas Pods.
Pop goes the Weasel.
Swiss May Dance.

Grade 7. Bluff King Hal (English May Pole Dance).
Butterfly Dance.
Annie Plucking Pears.
German Hopping Dance.

Grade 8. Ace of Diamonds.
Circle Dance.
Dance of Four.
Virginia Reel.

REFERENCE BOOKS: Crawford, *Folk Dances*; Johnson, G. E., *Education by Plays and Games*, Ginn & Co.; Johnson, G. E., *What to Do at Recess*, Ginn & Co.; Bowen, W. P., *The Teaching of Elementary Gymnastics*, F. A. Bassette Co.; Lincoln, Jeanette C., *May-Pole Dances*, American Gymnasia Co., Boston; Bancroft, Jessie H., *Games for the Playground, Home, School and Gymnasium*, Macmillan Co.; Stecher, Wm. A., *Games and Dances*, McVey Co.

NOTE: For material with reference to the Baltimore Public Athletic League, the Boy Scouts and the Girl Scouts, and the Camp Fire Girls, communicate with their secretaries.

The following material is taken from the "Course of Study in Physical Training" for the elementary schools of Washington, D. C., and is used with the permission of Dr. Rebecca Stoneroad, Director of Physical Training in the Washington Public Schools.

A. GENERAL DIRECTIONS:

In a good gymnastic lesson the following points should be considered.

1. Ventilation: All windows lowered a short and equal distance by a monitor.
2. Temperature: 65 degrees.
3. Lighting: Adjustment of curtains to admit sufficient light.
4. Good posture in sitting and standing.
5. Ease of movement in rising and sitting.
6. Promptness in obeying commands.
7. Correct name of exercise given as designated.
8. Correct signals and commands given as designated.
9. Exercises given the number of times designated.

10. Tone of voice adapted to movement taken.
11. Accuracy of position taken for exercise.
12. Precision in execution.
13. Energy in execution.
14. Good carriage of body while exercising.
15. No waste of time between exercises.
16. No unnecessary talking.
17. Individual criticism when necessary quietly given from side and back of room.
18. Uniformity of motion.
19. Quietness.
20. Cheerfulness of manner in execution.

B. SEATING:

Since it is injurious for pupils to sit in cramped positions in seats which are too small, or to sit in seats so high that their feet do not touch the floor, the Board of Education requires that:

"Each teacher having in her room a set of adjustable desks shall, at the beginning of each half year, measure the pupils with the measuring rod provided with each set of furniture and see to it that desk and seat are adjusted to fit the child at all times."

C. ARRANGEMENT OF CLASS FOR EXERCISES:

At the beginning of each half year, the teacher should assign to each pupil a place for physical exercises to be taken after rising. The arrangement should be according to height, with the shortest pupils in the front row across the room.

D. EXPLANATION OF PRINTED TERMS:

Signals for taking arm or leg positions printed on the preparatory drill will not be printed on the later lessons.

The italicized signal in the center of the page above the dotted line is the signal on which the position for the exercise is taken.

The italicized signal below the dotted line in the center of the page is the signal for returning to standing position.

Signals in a brace are to be repeated as many times as it is desirable to take the exercise. The signal farthest to the right finishes the exercise.

"Teacher count" means to count ONE AND, TWO AND, etc., returning to starting position on AND.

"Teacher count four" means to make four successive movements.

"Take the movement on six counts" means that one movement is to be done on six counts.

When the abbreviation Rep. for the word Repeat is printed at the right of the figure designated the number of times an exercise is to be taken a pupil returns to standing position before repeating the exercise.

E. APPLICATION OF WORK:

It is of the utmost importance that a practical application of the lessons in writing, rising, sitting, standing, walking, ascending, and descending stairs be insisted upon at all times during the day, thereby forming correct habits.

F. PREPARATORY DRILL:

I. Resting Position.

Sit far back on the seat with back resting against the chair, chest up, face front, hands in lap and feet together on the floor. Drill on quietness, and quickness in taking this position.

Signal..... Resting *Position.*

II. Upright Position.

Keeping the body far back on the seat of the chair raise the trunk to an erect position.

Signals..... *Upright.*

Return to Resting Position on the signal REST.

III. Class Rising.

After the preparatory signal *Rising,* pupils obey the following directions:

Signals:

Upright—Take Upright Position.

Rise—Placing the toe of the right foot directly sideways in the aisle rise without touching the desk and stand between the chairs with weight on both feet and heel stogether.

Change—Moving quickly and quietly take the place assigned for the exercises. Each pupil should stand exactly between the chairs and in the middle of the aisle.

IV. Standing Position:

When standing the head should be erect, the chest up, arms hanging loosely at sides, heels together and most of the weight of the body on the balls of the feet.

V. Individual Rising for Recitation.

When a pupil rises for recitation the points of good rising and the correct standing position should be insisted upon by the teacher. The pupil rises with one motion and without command.

VI. Class Dismissal.

When pupils rise for dismissal, the points of good rising and walking should be insisted upon. Pupils should rise with one motion without the command *Upright.*

VII. Arm Positions.

Hands on Hips.

Place hands firmly on hips with fingers together in front and thumbs back. The forearm and hand should be in a straight line.

Signals..... { *Position* / Hands *Down*

Hands Clasped Behind.

Clasp hands loosely down at back of body.

Signals..... { *Position* / Hands *Down*

Arms Folded Behind.

Fold arms behind body with a firm grasp.

Signals..... { *Position* / Arms *Down*

VIII. Diagonal Position.

Diagonal Position Right.

Lifting right foot and left heel, turn toward the right on the ball of the left foot, until facing a diagonal direction, then quietly bring heels together.

Signal, Diagonal position right.—*Turn.*

Front Position.

In the same manner, turn to the front of the room.

Signal, Front position.—*Turn.*

Diagonal Position Left.

Lifting left foot and right heel, turn toward the left on the ball of the right foot, until facing a diagonal direction.

Signal, Diagonal position left—*Turn.*

Front Position.

In the same manner, turn to the front of the room.

Signal, Front Position.—*Turn.*

IX. Side Position.

Side Position Right.

Lifting right foot and left heel, turn toward the right on the ball of the left foot until facing the side of the room, then quietly bring the heels together.

Signal, Side position right.—*Turn.*

Front Position.

In the same manner turn to the front of the room.

Signal, Front position.—*Turn.*

Side Position Left.

Lifting left foot and right heel, turn toward the left on the ball of the right foot until facing the side of the room.

Signal, Side position left.—*Turn.*

Front position.

In the same manner, turn to the front of the room.

Signal, Front position.—*Turn.*

X. Separating.

In Front Position.

One row across the room from the right to left remains stationary.

On the count *One* the rows in front of the stationary row step forward with the left foot to position between desks, while the rows behind take one step backward. On count *Two* the stationary row and the ones directly in front and in back of it remain still, while the other rows step forward or backward to position between seats. Continue counting until all the rows are the same distance apart. Take each step on the toes and lower heels together.

In the same manner return to places after the signal *Return.*

In Side Position.

Separate in the same manner by stepping sideways.

XI. Walking.

After giving the rhythm and the preparatory signals, *Ready, Walk,* all pupils in first row start walking with the left foot on the signal *Left.* They walk down the aisle and across front of room, followed by the other rows in succession. Cultivate lightness and buoyancy, and an erect carriage of the head.

XII. Halting.

After the preparatory command Class, given to attract attention, give the signal *Halt,* whereupon the class immediately halts, bringing the back foot up to Standing Position.

When walking is continued, *all* pupils should start walking at once with the left foot, on the signal *Left,* after the preparatory commands *Ready,* Walk.

Class Sitting.

After the preparatory signal *Sitting*, pupils obey the following directions:
Signals:

Change—Quietly return to Standing Position opposite own chair.
Sit—Placing the left foot in front of the seat, sit, and immediately take Resting Position.

G. PLAYGROUND GAMES:

Twenty-five yard dash.
Relay Race with Object.
Ball Across Circle.
Passing Ball Relay.
Roll Ball.
Sand Bag Jumping.
Sheep, Sheep Run.
Leap Frog.
Prisoner's Base.
Throwing at Goal.
Straddle Ball.
Potato Race.
Tip Up.
Shuttle Relay.
Catch Ball.
Round Ball.
Day and Night.
Pass Ball Overhead.
Chariot Race.
Three Deep.
Line Tag.
Corner Ball.

H. RHYTHMIC EXERCISES.

1. Side Change Step, Turning Right and Left.
Backs of Fingers on Hips

Whole school walk around room, halt, turn toward center of room and place backs of fingers on hips. Starting with right foot, on counts *One* and *Two* take change step toward the right, turning on ball of right foot on count *Two* and facing the wall. In signals *Three* and *Four* continue the Change Step toward the left, turning on ball of left foot toward the center of room on count *Four*. Take the exercise with a dancing motion.

To get the rhythm a tune should be sung, preferably by the teacher.

2. Narcissus Polka.
Backs of Hands on Hips.—Side Position.—Separate.
Signals:

One—Step toward the right.
Two.—Cross left foot back of right, bending knees.
Three—Step toward the left.
Four—Cross right foot back of left, bending knees.
One
Two Taking three skipping steps toward the right.

Three
Four—Bring heels together.
Repeat the whole toward the left.
To get the rhythm a tune should be sung, preferably by the teacher.

3. The Placing Forward and Leg Crossing.
Change Step.
Backs of Fingers on Hips.
Signals:
One—Touch the toe of the right foot forward.
Two—Raise the knee as high as hip, and cross right leg in front of left.
Three, *Four* } Changing step forward.
Repeat with left leg and continue with right and left alternately.
To get the rhythm a tune should be sung, preferably by the teacher.
Breathing.

4. Stepping and Hopping.
Turning in Place.
Hands on Hips.
Signals:
One—Step forward with right foot.
Two—Hop on right raising left foot backward.
Three—Step backward with left foot raising right knee and crossing leg in front.
Four—Hop on left foot.
One, *Two*, *Three*, *Four* } Rise on toes and starting toward the right, turn in place with four steps until facing in opposite direction.
Repeat the exercise turning to the front.
To get the rhythm a tune should be sung, preferably by the teacher.

5. Stepping Sideways, Leg Crossing and Turning.
Hands on Hips.—Side Position.
Signals:
One—Step toward the right and immediately swing left leg across the right, placing the toe at the right side.
Two—Rise high on toes and turn to the rear.
Three—Lower heels.
Continue toward the left on three counts. Reverse the exercise, returning to starting place. To get the rhythm, a tune should be sung, preferably by the teacher.
Breathing

6. Minuet Step.
Backs of Fingers on Hips.
Signals:
One—Touch the right toe diagonally forward.
Two—Raise right foot and touch toe again in same spot.
Three—Repeat, count *two*.
Four—Step forward with the right foot.

Five—Bring left toe back of right heel and bend knees.
Six—Straighten knees.
Repeat, touching left foot forward.

7. Deep Courtesy.
Backs of Fingers on Hips.—Separate.
Signals:
One—Step backward with the right foot, bending the right knee and the trunk forward.
Two—Raise the trunk, swaying forward to the left foot.
Three—Take a step forward with the right foot and turn to the rear on the ball of the right foot.
Immediately swing the left leg back, bend the left knee and continue the exercise.
To get the rhythm a tune should be sung, preferably by the teacher.
Breathing.

8. Grand Change.
Children form a ring and number off by twos and left to right.
Numbers *one* and *two* are partners.
Ones turn to left, *Twos* to right, facing partners.
Partners take right hands.
On signal *March*, each child begins to walk in the direction in which he is facing, weaving in and out as he swings his own partner by the right hand, the next one by the left hand, next one right and so on around the circle until he meets his own partner, when the "change" ends.

NOTE: Rhythmic exercises 1, 2, 3, 4 are for the fifth grade, all the rest are for the grades from sixth to eighth.

I. FOLK DANCES.

Chimes of Dunkirk.

Partners form a double circle, facing each other with hands on hips.

Stamp lightly with the right and left foot alternately to three counts, holding on the fourth. Clap own hands three times and on fourth count place hands on hips.

Taking partner's right hand, and starting with the left foot, take seven skipping steps, turning partner around and returning to place. Both partners then face line of direction, dropping hands on eighth count.

Join inside hands and starting with the left foot, take twelve skipping steps forward. On the next four counts the partner on the inside circle drops hand and steps to the left facing a new partner.

Hop Near Annika.

Couples form a circle facing line of direction with inside hands clasped as high as shoulder and outside hands on hips.

Starting with outside foot walk sixteen steps swinging arms continuing the arms swinging. Finish facing partner with backs of hands on hips.

Place right toe forward, twist the body toward the left and clap partner's left hand. Replace foot and clap own hands. Repeat through sixteen counts.

Couples quickly face line of direction with inside hands clasped. Change step forward starting with outside foot turning toward partner and swinging clasped hands back, then change step starting with inside foot turning away from partner and swinging arm forward. Continue through sixteen counts.

Cornish May Dance.

An even number of couples, numbered *One* and *Two* form a circle facing in line of direction.

Partners join inside hands and place outside hands on hips. During seven measures of the music all run forward *twenty-eight steps* swinging inside arms. During eight measures couples number *One*, without dropping hands, turn around and face couples number *Two* thus forming groups of four.

At the beginning of the second part of the music couples run *four steps* toward each other, then *four steps* back to place. During third and fourth measures girls come diagonally forward *two steps* take right hands and swing each other *four steps* and return to places on *two steps*.

During repetition of first two measures of the second part fours join hands and with *eight steps* make a complete circle to left. On third measure couples *One* run forward under raised arms of couples *Two*. On last measure turn and face in line of direction ready to start forward again.

NOTE: These first three folk dances are for the fifth grade; all the rest are for grades sixth to eighth.

Swiss May Dance.

"The cuckoo is singing, the May it is here;
In the fields and the forests, the green doth appear.
Then dance, children, dance, while the sky it is blue,
Turn 'round and turn under, while I go with you."

Partners form a double circle, join inside hands and place outside hands on hips.

Starting with the inside foot take six light running steps forward while singing "The cuckoo is singing." Partners face each other, step back with inside foot making deep courtesy on six counts while singing "the May it is here." Repeat, running in opposite direction and singing "In the field and the forest, the green doth appear."

During the singing of the third line partners clasp right hands and, starting with left foot, change places by taking three running steps. Place right foot back and on three counts make deep courtesy to partner. Repeat returning to original places.

Partners again clasp right hands and, while singing the last line, those of the inside circle make one complete turn under raised arms and run forward to the next dancer of the outside circle. On the last six counts new partners make deep courtesy.

Repeat the whole with new partners.

German Hopping Dance.

Form a single circle partners facing with inside hands joined and held high, outside hands on hips.

Meas. 1–8.

Skip outward four steps, skip inward four steps. Repeat. When skipping inward join outside hands and place inside hands on hips.

Meas. 1–8.

Skip outward four steps, hop in place, four times on inside foot. Skip inward four steps, hop in place four times on inside foot.

Meas. 9–16.

Repeat, making a complete turn away from partner on last four hops. Finish facing center, joining hands.

Meas. 9–16.

Whole circle turn right and run eight steps, then turn left and run eight steps.

Meas. 1–8.

Skip forward with right foot and bring left up to right heel, continue, keeping right foot in advance through four steps. Hop four times on right foot with leg raised backward. Skip backward four times on left foot, right leg is raised forward.

Meas. 1–8.

Repeat making complete turn on last four hops, finish with facing partner.

Bluff King Hal.

(English May Pole Dance.)

Couples form a circle all facing line of direction. The dancers of the outer circle are numbers *one;* those of the inner circle numbers *two.* Clasp inside hands and place outside hands on hips.

Meas. 1–8.

Skip sixteen steps starting with right foot. The first twelve steps are around in the circle; the last four are done in place while turning toward the center of the circle and clasping hands.

Meas. 9–10.

Take four skipping steps toward the center of the circle with hands clasped as high as possible and heads bent slightly backward.

Meas. 11–12.

Skip back to places four steps, with arms lowered and bodies bend slightly forward.

Meas. 13–16.

Same as 9–12.

Meas. 17–24.

Partners join right hands, free hand on hip, and starting with the right foot swing partner twice around with sixteen skipping steps. Finish facing center of circle.

Meas. 1–8.

Repeat skipping forward and backward twice.

Meas. 9–16.

Numbers *one* skip forward on four steps, take ribbons with right hand during eight steps and skip back to place on four steps.

Meas. 7–24.

Numbers *two* take ribbons and skip back to place.

Meas. 1–16.

Numbers *one* turn left and *two* turn right. Dance the grand chain through thirty-two skipping steps thus winding the maypole.

Meas. 17–20.

Skip four steps toward the centers and drop ribbons. Join hands and skip back to place. Repeat skipping forward and backward.

Meas. 1–8.

All skip sixteen steps around the circle. with hands joined and bodies slightly turned to right.

Circle Dance.

Class form a circle and number off by twos. Ones and Twos are partners. Join hands in a circle and skip to the left on eight counts, then skip to the right on eight counts returning to original position.

Letting go of hands the Ones skip forward toward the center on four counts, then back to places on four counts. Number Twos repeat this movement.

Number Ones now skip forward to center on four counts, join hands and skip to left on four counts, then back to places on four counts. Number Twos repeat this movement.

All join hands and skip forward on four counts, then back on four counts. Ones bow to the right on eight counts, while Twos bow to left, then partners bow to each other on eight counts.

Number Ones give right hands to partners, and circle toward their own left on eight counts, around number Twos, who stand still. Ones give left hand to partner and repeat circling toward the right on eight counts.

Number Twos repeat the movement. Ones standing still.

All join hands and skip left on eight counts, then right on eight counts. Finish the dance by bowing right and left on eight counts.

PHYSIOLOGY AND HYGIENE

FIFTH GRADE

Ages 10–12: Characteristics of this period in the child's development:

This is the most important period in elementary education so far as details of school work and the formation of habits are concerned. The body is not growing so rapidly, the brain has practically ceased growing, and there is not the great functional advance which is to accompany the advent of puberty in the period following. There is a lull in the demands upon the system—it is a time of storing up energy. There is less liability to disease. . . . . The heart is gaining in proportionate size and strength as compared to the arteries, and there is less liability to fatigue than in the previous period. The child is at the height of physical activity. More games are played now than at any other age.

In the nervous system while the brain has practically ceased growing in weight it is changing rapidly in structural development. According to Clouston, the special import of this period in the nervous system is the co-ordination of muscular action and the senses. The co-ordination begun in the previous period, but not developed to the fine point of adjustments, are now given depth and scope. This is the time when there must be laid the foundation of any future great skill. Skill in games, in manipulation, in the use of tools, in the playing of musical instruments, correctness and facility in the pronunciation of foreign languages cannot be so surely acquired if delayed beyond this period. It is therefore the period for drill and the forming of neuro-muscular habits.

Reasoning remains comparatively weak throughout this period, but is slowly strengthening. A tendency to critical judgment is appearing. The perceptive powers continue active, and the child is capable of close observation. It is still an eye and ear period. Memory is likewise strengthening, particularly memory for objects and their names. Imagination is active, suggesting here the value of objects and pictures for illustration. The animistic tendency is disappearing and superstitions are decreasing. The child is quite susceptible to suggestions, but he is influenced more by companions than by adults. He is never so removed from grown-ups as at this period. He is still selfish and self-assertive, yet gaining in social interest. He begins to form societies or clubs largely for games, athletics, and predatory expeditions, but he unites with others rather for his own profit. In the co-operative games the individualistic element still remains prominent. There is an increased regard for rule and law.

In the matter of games, interest in running games is culminating. . . . Interest in collections is at its height. The methods of collecting are by finding and, in this period increasingly, by trading and buying. In nature interest in pets, particularly in dogs and in the training of dogs, is rapidly increasing, reaching culmination in the next period. Interest in nature collections is high. Great interest in dolls is continuing. . . . . In construction interest increases in the details and skill of workmanship. In literature the dormant interest of the boy is shown in preference for action and adventure. There is added interest in history, in historical biography, and in general literature. The general puzzle interest culminates in mechanical puzzles at eleven years of age, in geometrical puzzles at from twelve to thirteen.

The games and plays of this period will be of great number and variety, involving great activity, considerable skill, often some co-operation, and will tend to further the development of the finer motor adjustments and the co-ordination of muscular action with sense judgments which it is the special office of this period to develop. They will also involve all the developing powers of the child, each peculiar need of the boy and girl being met by the emphasis upon this or that feature of the activity which the awakening interest will determine.—Johnson: *Education by Plays and Games.*

Certainly as Dr. Johnson outlines, in the large, the physical and mental nature of the fifth and sixth grade child, we are in a position to say that the following course of study offers a splendid opportunity to direct the daily regimen of the fifth grade child from the time he rises in the morning until, and after, he goes to bed at night.

It is to be hoped that the teacher will take advantage of the Boy Scouts', the Girl Scouts' and the Campfire Girls' movements, if her pupils belong to any of these organizations, by allowing the pupils to give talks describing the activities that go on in the camps.

Each teacher should make a daily inspection of the hygienic conditions in the class room if habits of cleanliness are to be fixed and if she values the hygienic and sanitary conditions that affect the life of her pupils. The inspection will take note of the following conditions:

1. Personal cleanliness of the pupils: hair, teeth, nails, nose, clothes.

2. Ventilation of the room; fresh air; the best temperature for energy in work; experiment for this.

3. Physical exercises at intervals during the day.

4. Blackboard-writing for eye strain.

5. Posture for correct muscle and bone habits.

6. Size of school desks in relation to size of pupils.

7. Breathing habits; [watch for mouth breathers, and, for them, if possible, consult a physician].

8. Speech habits.

9. Lunch inspection, care, and suggestions for eating, with opportunities provided for wholesome conversation while lunch is being eaten.

NOTE: For information on nutritious food for the pupils of this grade see "Food for School Boys and Girls," by Mary Swartz Rose, price ten cents; published by Teachers College, Columbia University.

I. Subject-Matter:

1. Air:
   What pure air is; man's need for it; how to get fresh air; drafts; ventilation of the building you are in; the lungs and breathing.
2. Sleep:
   Why and how we need sleep; some rules for sleeping; habits of sleeping.
3. Cleanliness:
   Dirt and cleanliness; microbes and keeping clean.
4. Care of the body:
   Hair, skin, nails, teeth, ears, eyes.
   The common towel, its dangers.
5. Eating:
   What to eat; when to eat; how much to eat; how to eat.
   The common drinking cup, its dangers.
6. First aid to the injured:
   Firearms and air rifles; how to hold a gun correctly; how to carry the injured; sprains.
7. Punctured wounds:
   From fish hooks, rusty nails, needles, splinters.
8. Cuts and bruises:
   Cuts from open knives and scissors; bruises.
9. Burns:
   How cared for.
10. Fires.
11. Accidents to the nose.
12. Poison:
    Treatment and antidotes.
13. Dog bites.
14. What the city does in case of accident.
15. Correlate the work with the civics, the physical education, and the industrial arts courses for the grade, and the war relief work made so necessary by the present world-crisis.

II. First Aid to the Injured:

The following outline is adapted from Johnson: *First Aid Manual*, [Johnson and Johnson Co., New Brunswick, N. J.] and is published here as a supplement to the work found in the text for the grade. In connection with this work of emergencies every school should be provided with a Johnson and Johnson's "First Aid Case." No. 18

case costs about $6 and is well worth the expenditure. If school funds are not available for this, Case No. 11, called the "Household Accident Case," costs only $1.25; certainly this is within the possibility of every school.

EMERGENCIES

1. *First things to do:*

Be calm.
Send for physician at once.
Move the patient to a quiet, airy place.
Keep people away.
Handle patiently, gently and quietly.
Place in comfortable position, lying down, head level with body (unless the head is injured).
If patient is vomiting, place on side with head low.
If bleeding, stop at once.
Cover and dress all wounds at once.

2. *Fainting:*

Lay patient flat with feet raised to send blood back to the brain.
Loosen clothing.
Give plenty of fresh air.
Cold water dashed over face.

3. *Bleeding:*

a. Slight wounds:
Cover with surgically clean cotton or gauze.
Bandage firmly.

b. Veins—blood dark red.
Lay patient down.
Loosen tight clothing, garters, etc.
Elevate wounded part.
Press on wound with hard pad of clean gauze or cotton.
Apply tight bandage near wound, on side farthest from the heart.

c. Arteries—bright red color—spurts.
Great danger.
Lay patient down—remove clothing from wound.
Elevate wound.
Press thumb or finger covered with surgically covered gauze or clean towel on or into wound.
Replace this by crowding gauze into wounds and hold with tight bandage.
Compress with tight bandage *between* wound and heart.
When bleeding is stopped give hot tea, coffee, or milk.
Cover wound at once with surgically clean gauze or cotton and bandage.
Release slightly the tight bandage.
Do not use soiled covering—it may cause blood poisoning.
Keep absolutely quiet.

BLEEDING DONT'S

Don't use lukewarm water—it increases bleeding. Use ice, ice-cold water or water as hot as can be borne.

Don't use cobwebs, tobacco, mud, or other like things to stop bleeding.

Don't give stimulants.

Don't put bare fingers in or on wounds.

Don't keep tight bandage applied longer than necessary.

Don't use any material but surgically clean.

4. *Burns and Scalds:*

Remove clothing from burns.

Let out water from blister by piercing low on side with sterilized needle.

Cover burn to exclude air.

Never hold a burn to heat.

a. *Slight burns:*

Apply *common baking soda.*

Cover with clean gauze.

b. *Severe burns:*

Cut away clothing. If clothing sticks use warm water or oil to loosen.

Apply:

sweet oil,
lard,
olive oil,
carron oil (linseed oil and lime water)
vaseline,
white of egg.

In absence of oils dust with starch and flour.

Burns must be covered as quickly as possible.

c. Burns from Caustic Lye or Strong Ammonia.

Flood with water, then with vinegar and then treat as for burns by fire.

d. Burns from Acid.

Flood with water, then wash with solution of baking soda.

e. Lime in Eye.

Flood with water, bathe with diluted vinegar or lemon juice.

f. Frost Bite.

Rub frozen part with snow, bits of ice, or put in cold bath.

g. Sun Burns.

Baking soda, vaseline, or oil.

5. *Cuts:*

Wash thoroughly with absorbent cotton and cold or very hot water, (which will cleanse and arrest bleeding), then with antiseptic solution.

Place over the wound a compress of clean muslin wet with solution and bind not too tightly.

6. *Tear or Lacerated Wound:*

Caused by nail or brick, etc.

Danger of scar if large—physician necessary.

Cleanse carefully with lukewarm water, followed by antiseptic solution.

Bring edges together as well as possible, and cover the wound with wet compress and bandage loosely.

7. Punctured Wounds—tacks, splinters, etc.

Remove object.

Squeeze injured part in warm water to form flow of blood which helps to wash away impurities which may have entered.

If there is a tendency to swell, a warm antiseptic poultice may be applied.

HINTS FOR DRESSING WOUNDS

Send for doctor.
Don't touch wound with bare unclean hands.
Arrest bleeding.
Do not disturb blood clots.
Remove foreign substance when it can be easily done.
Do not wash wounds with water only, though supposed to be clean.
Bring the edges of the wound together.
Rest is essential to the healing of wounds.

8. Dog Bites:

Press out wound thoroughly in warm water.
Cover with cold wet dressing.

9. Poison, except corrosive substances.

a. Cause evacuation of stomach contents
   A. Emetics:
      1. T. mustard—1 cup warm water.
      2. Run finger down throat.
      3. Ipecac—1 T. followed by glass of warm water—repeat every few minutes.

b. Irritant poisons.
   Give glycerine, sweet oil, white of egg, starch water, flax seed tea.
   (1) Acid poisoning:
      Give alkalies—chalk, magnesia, washing soda, soap followed by sweet oil.
   (2) Alkali poisoning—lye, ammonia, etc.
      Give vinegar or lemon juice followed by olive oil.

III. Physical exercises and recess recreations:

Physical exercises five minutes each day and the free play on playground provide a laboratory for the teacher which will enable her to see whether the children are experimenting with the knowledge they have gained about their bodies, and are obeying the principles of physical conduct upon which their own health, and that of their comrades, is based. The physical exercises give development to the following:

1. Good position.
2. Arm movements.
3. Leg movements.
4. Arm and leg combination movements.
5. Head movements.
6. Arm, leg, and head combination movements.

7. Body movements.
8. Arm, leg, head, and body combination movements.
9. Correct breathing.
10. Skipping, running, jumping.
11. Folk dancing.
12. Games.

TEXT: Charlotte Vetter Gulick: *Emergencies.*

REFERENCES: Pyle, *Personal Hygiene,* Saunders: Bigelow M. A. and, Bigelow, A. A., *Introduction to Biology,* Macmillan Co; Hutchinson, Woods, *Preventable Diseases,* Houghton, Mifflin & Co.; Jewett, *Good Health,* Ginn & Co.

SIXTH GRADE

Ages 10–12. *Characteristics of this period in the child's development:*

This is the most important period in elementary education so far as the details of school work and the formation of habits are concerned. The body is not growing so rapidly, the brain has practically ceased growing, and there is not the great functional advance which is to accompany the advent of puberty in the period following. There is a lull in the demands upon the system—it is a time of storing up energy. There is less liability to disease. . . . . The heart is gaining in proportionate size and strength as compared to the arteries, and there is less liability to fatigue than in the previous period. The child is at the height of physical activity. More games are played now than at any other age.

In the nervous system while the brain has practically ceased growing in weight it is changing rapidly in structural development. According to Clouston, the special import of this period in the nervous system is the co-ordination of muscular action and the senses. The co-ordinations begun in the previous period, but not developed to the fine point of adjustments, are now given depth and scope. This is the time when there must be laid the foundation of any future great skill Skill in games, in manipulation, in the use of tools, in the playing of musical instruments, correctness and facility in the pronunciation of foreign languages cannot be so surely acquired if delayed beyond this period. It is therefore the period for drill and the forming of neuro-muscular habits.

Reasoning remains comparatively weak throughout this period, but is slowly strengthening. A tendency to critical judgment is appearing. The perceptive powers continue active, and the child is capable of close observation. It is still an eye and ear period. Memory is likewise strengthening, particularly memory for objects and their names. Imagination is active, suggesting here the value of objects and pictures for illustration. The animistic tendency is disappearing and superstitions are decreasing. The child is quite susceptible to suggestions, but he is influenced more by companions than by adults. He is never so removed from grown-ups as at this period. He is still selfish and self-assertive, yet gaining in social interest. He begins to form societies or clubs largely for games, athletics, and predatory expeditions, but he unites with others rather for his own profit. In the co-operative games the individualistic element still remains prominent. There is an increased regard for rule and law.

In the matter of games, interest in running games is culminating. . . . Interest in collections is at its height. The methods of collecting are by finding and, in this period increasingly, by trading and buying. The nature interest in pets, particularly in dogs and in the training of dogs, is rapidly increasing, reaching culmination in the next period. Interest in nature collections is high. Great interest in dolls is continuing. . . . . In construction, interest increases in the details and skill of workmanship. In literature the dormant interest of the boy is shown in preference for action and adventure. There is added interest in history, in historical biography, and in general literature. The general puzzle interest culminates in mechanical puzzles at eleven years of age, in geometrical puzzles at from twelve to thirteen.

The games and plays of this period will be of great number and variety, involving great activity, considerable skill, often some co-operation, and will tend to further the development of the finer motor adjustments and the co-ordination of muscular action with sense judgments which it is the special office of this period to develop. They will also involve all the developing powers of the child, each peculiar need of the boy and girl being met by the emphasis upon this or that feature of the activity which the awakening interest will determine.—Johnson: *Education by Plays and Games.*

Certainly as Dr. Johnson outlines in the large, the physical and mental nature of the fifth and sixth grade child, we ought to be in a position to direct him, and develop in him a keen interest in his physical well-being.

It is to be hoped that the teacher will take advantage of the Boy Scouts', the Girl Scouts' and the Campfire Girls' movements, if her pupils belong to either of these organizations, by allowing these pupils to give talks describing the activities that go on in the camps.

Each teacher in each grade should make a daily inspection of the hygienic conditions in her classroom, if habits of cleanliness are to be fixed and if she values the hygienic and sanitary conditions that affect the life of her pupils. The inspection will take note of the following conditions:

1. Personal cleanliness of the pupils: hair, teeth, nails, nose, clothes.
2. Ventilation of the room, fresh air, the best temperature for energy in work—experiments for this should be tried.
3. Physical exercises at intervals during the day.
4. Blackboard writing for eye strain.
5. Posture for correct muscle and bone habits.
6. Size of seats in relation to size of pupil.
7. Breathing habits [watch for mouth breathers and for them, if possible, consult a physician].
8. Speech habits.

9. Lunch inspection, care, and suggestions for eating, with opportunites provided for wholesome conversation while lunch is being eaten.

NOTE: For information on nutritious food for the pupils of this grade see "Food for School Boys and Girls" by Mary Swartz Rose, price ten cents; published by Teachers College, Columbia University.

I. Subject-Matter:

1. Food inspection.
2. Tobacco and national vigor.
3. Bone and muscle records:
   a. Danger from the school desk.
   b. Muscles contracting and stretching.
   c. The muscle itself.
   d. Bondage and freedom for the feet.
   e. Stiff support for groups of muscles.
   f. Assistance from joints.
   g. Things that hinder strength and speed.

REFERENCES: Frances Gulick Jewett, *The Body at Work*, pp. 1–66; Overton, *Applied Physiology* (*Intermediate*), pp. 155, 174.

4. The heart when it is at work:
   a. Standard of the heart beat; the pulse; exercise for the heart.
   b. The discoveries of Galen, the Greek; and Harvey, the Englishman.
   c. Circulation.
5. Respiration:
   a. Breathlessness.
   b. Where blood changes color.
   c. Diseases of the respiratory organs.

REFERENCES: Overton, *Applied Physiology*, pp. 60–91; Jewett, *The Body at Work*, pp. 67–116.

6. Correlate the work closely with the courses of study in civics, physical education, and cookery and manual training.

II. First Aid to the Injured:

See outline in the course for the Fifth Grade.

III. Physical exercises and playground recreation:

Physical exercises for five minutes each day and the free play on the playground provide the teacher with a laboratory that should enable her to see whether children are experimenting with the knowledge they have gained about their bodies, and are obeying the principles of physical conduct upon which their own health

and that of their comrades is based. The physical exercises give development to the following:

1. Good position.
2. Arm movements.
3. Leg movements.
4. Arm and leg combination movements.
5. Head movements.
6. Arm, leg, and head combination movements.
7. Body movements.
8. Arm, leg, head, and body combination movements.
9. Correct breathing.
10. Skipping, running, and jumping.
11. Folk dancing.
12. Games.

Texts: Jewett, *Town and City*; Jewett, *The Body at Work.*

REFERENCE BOOKS: Pyle, *Personal Hygiene*, Saunders Company; Tolman, *Hygiene for the Worker*, A. B. Co.; Hutchinson, Woods, *Preventable Diseases*, Houghton, Mifflin & Co.; Bigelow, M. A., and Bigelow, A. A., *Introduction to Biology*, Macmillan Co.

SEVENTH GRADE

Ages 13–15. *Characteristics of this period in the child's development:*

Just as there was, at about the age of eight or nine a period of readjustment of motor ideals, so at about twelve, the last year of the previous period, there is a time of halting, uncertainty, and readjustment of social ideals. We are now at the threshold of a new birth, a new conception of life and of the use of powers.

This is the period of most rapid bodily growth. The heart increases rapidly in size relative to the blood vessels, and there is a marked increase in blood pressure. There is also a rapid increase in lung and chest capacity, in strength of grip of hand, and in control of accessory muscles. The sexual organs are developing rapidly. While the brain is not perceptibly increasing in weight, there is a rapid structural change and accelerated development of association fibers. It is the period of greatest tendency to nervous disorders, and there is an increased liability to disease.

This is the time of the most rapid development of the heart, and emotions. Love, pity, fear, anger, jealousy, emulation, ambition have a new awakening. There is frequently great emotional instability. Anger and pugnacity increase; sympathy increases. There is periodic laziness, awkwardness, self-consciousness, tendency to reverie, dreams of greatness, self-assertion. There is a tendency to affection and mannerisms, to slang, to desire to show off, to freakishness and pranks.

There comes now a new tendency to imitation and suggestion. There is a shifting of susceptibility to influence of companions, to susceptibility to influence of adult ideals and example. There is a striking increase in susceptibility to religious influence; also the greatest liability to incorrigibility, misdemeanors, and crime. There is a desire to leave home, yet susceptibility to homesickness. There is a keen sense of humor, a tendency to practical joking, great sensitiveness to praise, censure, or ridicule.

There is now an increasing tendency to rudimentary organizations, gangs, clubs, and great interest in competitive and co-operative games; also in taking and giving of 'stumps.' The circle of favorite games is narrowing, and sex differences become prominent. There is great admiration for physical prowess, hero worship, love of adventure, and love of hunting and camping.

Reasoning is strengthening. There is on the whole less liability to errors in reasoning. The memory is increasing and the imagination is very active. The general reading interest is at its height. A genuine historic interest appears; also interest in drama. The collection interest gains in definiteness and permanency. There is great interest in nature and the training of animals. There is an increase in the regard for money and for trading. The puzzle interest involves mainly language and arithmetical puzzles. There is an increased interest in music and in rhythm.

The environment in this period, then, should furnish opportunity for games and plays involving great physical activity and adapted to develop the large muscle areas, to continue the development of the finer motor adjustments, and to relate individual activity to a social group. These plays should develop the manly qualities—courage, generosity, staying power, and social consciousness. The increased interest along the many lines mentioned above should be a means for supplying many varied activities tending to direct the attention and interests without rather than within, relieving the peculiar and often morbid emotional tendencies of this time. The narrowing circle and increased intensity of interest make this a favorable time for fixing permanent interests in some line—in athletics, nature, science, literature, music, or art.—Johnson: *Education by Plays and Games.*

Each teacher in each grade should make a daily inspection of the hygienic conditions in her classroom if habits of cleanliness are to be fixed, and if she values the hygienic and sanitary conditions that affect the life of her pupils. The inspection will take note of the following conditions:

1. Personal cleanliness of the pupils: hair, teeth, nails, nose, clothes.

2. Ventilation of the room, fresh air, the best temperature for energy in work with experiments to help establish a working temperature.

3. Physical exercises at intervals during the day.

4. Blackboard writing for eye strain.

5. Posture for correct muscle and bone habits.

6. Size of seats in relation to size of pupil.

7. Breathing habits [watch for mouth breathers and for them. if possible, consult a physician].

8. Speech habits.

9. Lunch inspection, care, and suggestions for eating, with opportunities provided for wholesome conversation while lunch is being eaten.

NOTE: For information on nutritious food for the pupils of this grade see "Food for School Boys and Girls" by Mary Swartz Rose, price ten cents, published by Teachers College, Columbia University.

I. Subject-Matter:

1. Personal hygiene.
2. Digestion:
   a. Experiments in eating; food.
   b. From food to blood; the peristaltic action and the villi.
   c. Gland laboratories for the aid of the appetite and general health.
   d. Intemperance, poisons, tobacco, alcohol.
3. The skin:
   a. Work, heat, and fuel.
4. The nervous system:
   a. Motion and sensation.
   b. Service from cerebrum.
   c. Structure of the nerve machine.
   d. Neurons at work, at rest.
   e. Fatigue.
   f. Effect of drugs and alcohol on brain and character.
   g. Habit formations or bundles of habits.

II. First Aid to the Injured:

See the fifth grade course of study for outline, pp. 390–392.

III. Correlate the work with the course of study in civics, physical education, household economics and manual training.

Text: Jewett: *The Body at Work.*

REFERENCE BOOKS: Overton, *Applied Physiology (Intermediate)*, A. B. Co.; Jewett, *Control of Body and Mind*, Ginn & Co.; Pyle, *Personal Hygiene*, Saunders Co.; Tolman, *Hygiene for the Worker*, A. B. Co.; Hutchinson, Woods, *Preventable Diseases*, Houghton, Mifflin; Bigelow, M. A., and Bigelow, A. A., *Introduction to Biology*, Macmillan Co.

EIGHTH GRADE

A Few "Gets"

Get the daily bath habit.
Get the daily exercise habit.
Get the fresh air habit.
Get the laughing habit.
Get the "moderation in all things" habit.—(From the report of the *Mental Hygiene Congress.*)

Ages 13–14. *Characteristics of this period in the child's development:*

Just as there was, at about the age of eight or nine a period of readjustment of motor ideals, so at about twelve, the last year of the previous period, there is a time,

of halting, uncertainty, and readjustment of social ideals. We are now at the threshold of a new birth, a new conception of life and of the use of powers.

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be fixed, and if she values the hygienic and sanitary conditions that affect the life of her pupils. The inspection will take note of the following conditions:

1. Personal cleanliness of the pupils: hair, teeth, nails, nose, clothes.
2. Ventilation of the room, fresh air, the best temperature for energy in work with experiments to help establish a working temperature.
3. Physical exercises at intervals during the day.
4. Blackboard writing for eye strain.
5. Posture for correct muscle and bone habits.
6. Size of seats in relation to size of pupil.
7. Breathing habits [watch for mouth breathers and for them, if possible, consult a physician].
8. Speech habits.
9. Lunch inspection, care, and suggestions for eating, with opportunities provided for wholesome conversation while lunch is being eaten.

NOTE: For information on nutritious food for the pupils of this grade see *"Food for School Boys and Girls"* by Mary Swartz Rose, price ten cents; published by Teachers College, Columbia University.

I. Subject-Matter: Personal Hygiene.

By the end of the Eighth Grade it is expected that, through the work of the previous grades, the child will have a practical knowledge of the following factors involved in personal health and hygiene.

1. *Definition:*

   Preservation and restoration vs. Preservation and improvement.

2. *Value of health;*
   a. Duty to be well.
   b. Willingness to do anything to acquire health.
   c. Economy of health.
   d. Personal responsibility for health.
   e. Personal limitations.

3. *Causes of ill health:*
   a. Ignorance.
   b. Need of greater knowledge and higher ideals.
   c. Carelessness.

d. Intemperance:
   1. Drink.
   2. Food.
   3. Work.
   4. Pleasure.

4. *Health:*
   a. Physical—living.
   b. Mental—service.
   c. Moral—ideals.

5. *The Human Fortress:*
   a. *Outer wall—the skin.*
   b. *Watchmen on the wall:*

Sense organs: Sight, sound, smell, taste, touch.

   c. *The Fort:*
      a. Air—respiratory.
      b. Porters—circulatory.
      c. Food and its distribution—alimentary.
      d. Sewage—excretory.
         1. Skin.
         2. Kidneys.
         3. Breath.
         4. Bowels.
      e. Soldiers—bacteria.
      f. Officers—nervous system.

II. Preventable Diseases

1. Colds:
   a. Causes.
      [1] Old and new theory.
      [2] The part damp clothing, wet feet and drafts play in bringing on a cold.
   b. Resemblance of colds to other diseases.
   c. Best preventives.
   d. Treatment.
      a. Good.
      b. Bad.

2. Pneumonia;
   a. Cause.
      [1] Facts against the old theory of exposure.
   b. Symptoms.
   c. Treatment.

3. Tuberculosis:
   a. Theories of development.
      [1] Infection.
      [2] Heredity.
   b. Symptoms.
   c. Death rate.
   d. Means of prevention.
   e. Treatment.
      [1] Home treatment.
      [2] Sanitarium.
      [3] Effect of different climates.
4. The burdens entailed by tuberculosis:
   a. On individuals and families.
   b. On the community.
   c. On the industry.
   d. On social progress.
5. The cost of securing effective control of the disease.
   a. In large cities.
   b. In smaller towns.
   c. In rural communities.
6. Adverse industrial conditions:
   a. Occupations that develop it.
   b. Overwork and nervous strain.
   c. Effect of improvements in factory conditions on the health of the employees.
7. Educational methods and agencies:
   a. Special literature for general distribution.
   b. Exhibits and lectures.
   c. The newspapers.
   d. Instruction in schools.
8. The social control of tuberculosis:
   a. National.
   b. State.
   c. Municipal.
   d. Rural.
   e. Departments of health and public relief.
   f. Private endowments.
   g. Other relief agencies.
9. Tuberculosis in animals and its relation to man.

III. First Aid to the Injured.

See the outline in the Fifth Grade course.

IV. Correlate the work with the civics, household economics, and manual training for the grade.

REFERENCE BOOKS: Hutchinson, Woods, *Preventable Diseases*, Houghton, Mifflin & Co.; Hutchinson, Woods, *Handbook of Health*, Houghton, Mifflin & Co.; Pyle, *Personal Hygiene*, Saunders Company; Overton, *Applied Physiology*, A. B. Company; Tolman, *Hygiene for the Worker*, A. B. Co.; Allen, *Civics and Health*, Ginn & Co.; Bigelow, M. A., and Bigelow, A. A., *Introduction to Biology*, Macmillan Co.; Publications of the National Association for the Study and Prevention of Tuberculosis, 105 E. 22nd St., New York City, N. Y.

GENERAL SCIENCE

SEVENTH AND EIGHTH GRADES

Up to the Sixth Grade the study of nature has consisted mainly of lessons based on zoology and botany. In the Sixth Grade, physiology, personal hygiene, and civic sanitation form the core of the science work. In the Seventh and Eighth the course in general science is mapped out tentatively and is drawn mainly from the field of physics. It should be supplemented by the chemistry of foods, cookery, and textiles in the home economics course for the grade and by the introduction to biology that comes with the study of the insects that bring disease to mankind.

The seventh and eighth grade teachers after consultation, may apportion the outline between the two grades. A single laboratory may be secured, upon request, from the office of the supervisor. Just as soon as the course is established in all the schools the seventh and eighth grade teachers will be called together to give criticisms, and suggestions for revising the work. Fortunately, or unfortunately, the work must be done without a textbook in the hands of the pupil, (that will come later) but each teacher will be supplied with a desk copy of a manual of simple experiments:

NOTE: For the arrangement and planning of the outline we are indebted to M. E. G. McCloskey, principal of the Agricultural High School, Sparks, Baltimore County.

I. Air: Some of its characteristics:

Air is a material, a gas occupying space.

Experiment 1. Try to push an empty wide-mouthed bottle held upright with mouth downward, into water in a deep bucket. There is something which prevents the water from entering. Was the bottle really empty? Bicycle and automobile tires and inflated footballs show evidence of being filled. Another application is the diving bell used for men working below the surface of the water.

Experiment 2. Wet the palm of the hand and hold it tightly over the mouth of a lamp chimney while you push it down into water. (A large cork to close the end of the chimney will serve the purpose better.) The result is the same as with the bottle. Now take the hand from the top of the chimney and again push it down into the water. Result? Why?

Experiment 3. Fill the bottle used in Experiment 1, and invert in water, being careful that the water does not run out. Using a rubber tube or bent glass tube blow water up into the bottle. The air takes the place of the water, and the water drives it out. This illustration shows the principle by which men remain alive for some time below the deck of a wrecked ship, but are drowned at once if a hole is cut in the deck.

II. Air has weight and causes pressure:

Experiment 1. Fill a chemical flask partly with water and heat over an alcohol lamp until the water is boiling in the flask. Then insert a tight cork into the mouth of the flask and remove from the flame. Allow it to set until quite cool, and then cool further by pouring cold water over it. After a time the flask will burst, not *out* but *in* from the pressure which the air on the outside (15 pounds to the square inch) exerts on the flask. The equalizing pressure has been removed from the inside by making a partial vacuum there. (The bottle has been filled with steam which drives out the air. When this is condensed it occupies much less space and the inside pressure is removed.)

Experiment 2. Construct an intermittent siphon using a funnel, one-holed cork, and bent glass tube. Fill the funnel slowly. When the water has passed over the highest point of the delivery tube, gravity starts the water flowing from the outlet. This continues until the surface of the water in the funnel tube has been lowered below the inlet tube, when it ceases to flow until the water has again filled up the delivery tube. This forms a natural siphon, which flows at regular intervals. It is the cause of springs which flow and stop, flow and stop, etc.

Experiment 3. Using a flask, a straight glass tube, a bent tube, a two-holed rubber stopper, and a water glass. Fill the flask with water and invert so that the straight tube is below the surface of the water in the glass, and the bent tube runs to a waste bucket. The attraction of gravity starts the water flowing from the bent tube. The removal of this water from the flask lessens the pressure of air in the flask, and the outside air pressure, becoming greater relatively, forces the water up the straight tube from which the air has been exhausted.

NOTE: *Experiments 2 and 3* give the principles upon which pumps and mechanical siphons work. Water flows in air-exhausted tubes 34 feet, if they are mechanically perfect, practically about 32 feet. Water can not be raised with a siphon higher than this, nor can the valve of a pump which sucks water up be more than this distance above the surface of the water. Mercury being 13 times as heavy as water rises 1/13 as far, and this principle is used in the construction of the barometer. The greater the air pressure on any particular day the greater is the rise of mercury in the air-exhausted tube. As the density of air is greater at sea level than on the high lands, so will the barometer reading be greater at sea level.

Experiment 4. Fasten a candle to the bottom of a shallow pan with a small amount of water in the bottom. Light the candle and set a lamp chimney over it. The flame burns for a moment and then dies out. Remove the chimney, light the candle, and place the chimney over the flame again so that there is an open space between the bottom of the chimney and the surface of the water. The candle continues to burn. Set it down in the water and it goes out. Light the candle again and set the chimney over it and in the water, first having inserted a piece of cardboard the width of which is equal to the diameter of the chimney, and which is about three inches long, into the upper end of the chimney. The flame will continue to burn, and if a lighted match is held on each side of the cardboard the direction of the current of air on each side may be discovered.

From this experiment the principles of combustion, and breathing may be drawn. The candle, to burn, needs oxygen from the air. When the oxygen is used up carbon dioxide takes its place, and it being heavier than air does not flow

out of the chimney. If, however, the air is allowed to come in at the bottom of the chimney a circulation is set up and a continuous supply of fresh air is furnished. The heat from the candle warms the air above the flame causing it to rise in the chimney and out of it while the cold air, which contains more oxygen, rushes in from below to replace it. The use of chimney for fires in houses, and tall smoke-stacks for manufacturing plants may be explained from this. House and barn ventilation are explained from the last part.

III. Expansion and contraction of liquids, gases, and solids from change in temperature.

Experiment 1. Using a flask fitted with a one-hole cork and a straight glass tube, fill with water until the surface of the water is just above the cork in the tube. Heat slowly. The water will expand and rise in the tube. When cooled it will lower to its original place. The blacksmith uses this principle when he heats a tire to expand it, places it over the wheel, and cools it. When it cools it contracts and sets tight over the felloe of the wheel. We use it when we open a glass stoppered bottle (in which the stopper is set) by pouring hot water over the neck, thus expanding the neck, not the stopper. In the construction of bridges in which long steel spans are used only one end is fastened, the other being free to move on rollers to care for the expansion and contraction due to change in temperature. Land and sea breezes are due to expansion and contraction of the air over certain areas.

Water reaches its maximum density at 4 degrees centigrade. Unlike other materials it expands both below and above this figure. Consequently water freezing in a container is likely to burst it. The water of a lake when freezing becomes lighter on the top than at the bottom, and the ice remains on the surface. Otherwise the ice would sink and the lake would become a solid mass of ice, and all life in it would be destroyed.

A gas expands 1/273 of its volume for every degree's rise in temperature, and contracts a like amount for a fall in temperature. This accounts for the reason why cold air is more invigorating than warm air. We breathe in more oxygen in the same volume of air. Figure the number of cubic feet of air we must breathe to consume 10 square feet of oxygen, if oxygen makes up one-fifth of the air, at 40 degrees C. and 20 degrees C. below zero. These temperatures on the centigrade scale correspond approximately to 100 degrees F. and 0 degrees F.

IV. Cooling by evaporation.

Experiment 1. Fill each of three 4 oz. bottles half full of ether, alcohol, and water respectively. The bottles should be provided with corks and should have been standing in the room long enough to acquire room temperature. Hold a thermometer with a string attached to the end and swing it slowly through the air until it acquires a reading of the temperature of the air and until the mercury becomes constant. Record this as room temperature. Insert the thermometer in the ether bottle until the bulb is below the surface of the liquid. After one-half minute record the temperature as that of ether in a closed vessel. Repeat the operation with alcohol, and water.

Experiment 2. Pour into evaporating dishes enough of each liquid to cover the bulb of the thermometer. Pour about the same amount into a test-tube and set aside. Place the thermometer in the evaporating dish which contains the ether, watch the temperature until it ceases to change and record. Repeat with alcohol and water, and with the ether in the test tube.

Record as follows.
Temperature of room =
Temperature of bottle of ether =
Temperature of bottle of alcohol =
Temperature of bottle of water =
Temperature of ether in dish =
Temperature of alcohol in dish =
Temperature of water in dish =
Temperature of ether in tube =

Experiment 3. Place a drop of each liquid on your hand, and notice the order in which they disappear. What feeling do they impart to the flesh? Can you connect this with the rate of evaporation. In evaporating, a liquid or solid must obtain heat, and it usually does so from the nearest available medium, in this way lowering the temperature of the medium. We would expect that those which evaporate the more rapidly would absorb heat the more rapidly. How does this check with your observations?

Experiment 4. If we were to increase the rate of evaporation, we would expect to cool the surrounding medium still more rapidly. Wrap a bit of absorbent cotton about the bulb of the thermometer and dip it in water. Wave it through the air to increase the rate of evaporation and note the temperature. Record it when it becomes constant. Repeat with alcohol, and again with ether, and record the constant temperature.

This principle is of practical importance in certain of the ice manufacturing machines, in which a portion of the water put in the machine is evaporated by removing the air pressure on it, and in so doing removes sufficient heat from the rest of the water to cause it to solidify. Climatic conditions near large bodies of water are affected by this condition, being cooler in summer when the water is evaporating, and warmer in winter when the water is freezing. Dew, rain, fog, and hail are formed when the temperature of the atmosphere is lowered sufficiently to bring about saturation. Additional cooling brings about condensation and precipitation.

V. Soil and its water holding capacity:

Experiment 1. Fill two lamp chimneys, one with clay and one with sand, both rolled fine, and packed in the tubes. Set in a pan of water and record the height of the water as it rises in the tubes. Water tends to fill empty spaces in the soil, and will do so when it is able to wet the sides of the space, then rising to the space above. The chimneys must have a bottom made of cheese cloth to hold the soil.

Upon this depends the rise of the water from the water table in land to supply water for the use of plants during a dry spell in the summer. It is very important in agriculture. The kind and condition of the soil affects the rate of rise very much, largely, because the air space determines whether the water is able to rise or not. Farmers try to get their soil in such condition that the water will rise freely. The same thing is illustrated by the rise of oil in a lamp wick, and the spread of ink on a blotter.

VI. Work and working capacity:

Experiment 1. The principle of work accomplished depends upon the force employed times the space through which it moves, i. e. W = F times S. Thus with a pulley or series of pulleys the work accomplished is equal to the amount of force used multiplied by the space through which the force travels. This is to obtain a mechanical advantage. Speed is sacrificed to obtain power.

Experiment. 2. Theory of moments. Suspend a meter stick so that it balances. Then let a mass weighing say 300 grams be hung by a thread 15 cm. from the fulcrum. Then suspend 100 grams at a point on the opposite side where it will again cause the stick to balance. This point will be found to be 45 cm. from the fulcrum. The product $Fl' = Wl''$. No matter where the weights are placed on either side of the fulcrum, the product of the acting force by its distance from the fulcrum will be equal to the resisting force W times its distance from the fulcrum.

Explain by the same principle, the capstan, jack-screw, worm-wheel, vise, and windlass, all of which are used to obtain mechanical advantages for work to be done, and while using less force than work accomplished move through more space than does the work accomplished.

The work accomplished is never equal to the energy expended because of mechanical inefficiency. That which is lost is transformed to heat, which is said to be due to friction. If we pound a piece of metal we soon find that it becomes hot. In this case little work is accomplished and most of the energy is transformed to heat.

Method:

By experimenting with some of these household applicances show how and why they help us and how much the lever gives us the advantage in our work.

By further experimentation the three classes of levers may be discovered.

NOTE: It is left to the discretion of the teacher not to make the work too technical but to develop sufficient knowledge of the subject to make the work scientific and at the same time to keep it very simple.

1. Mechanical appliances in the home:
   - Levers:
     - First class levers.
       - Scissors.
       - Pump handle.
       - Tack lifter.
       - Pliers.
     - Second class levers.
       - Can opener.
       - Nut cracker.
       - Lemon squeezer.
       - Fruit press.
     - Third class levers.
       - Fork and knife.
       - Fire tongs.
       - Spoon.
       - Grass cutter.
       - Sugar tongs.
     - Other levers not so easily recognized as such.
       - Wheel and axle.
       - Windlass.
       - Coffee mill.
       - Clothes wringer.
       - Ice-cream freezers.
       - Bread mixer.

2. Pulleys:
   A window.
   A hanging lamp.
   Try to develop the law of the pulley (one rope, two rope, three rope, and four rope pulleys.)
3. Screw appliances:
   The clamp.
   Faucet.
   Meat grinder.
   Fruit-press.
   Jack-screw.

Note the relation of the lengthening of the handle to the force required to turn the handle. "If the handle is made twice as long, the force required is ½; if it is made three times as long, the force is ⅓; etc." If practical discuss the *law of the machine* here, and also the *law of work.*

VII. Magnetic fields and magnetism:

Experiment 1. Lay a bar magnet in a groove in a board. Place a large sheet of paper over it, and sift iron fillings evenly over it. Tap the paper gently with a pencil. The filings will be found to arrange themselves in symmetrical curves running from one pole to another. Hold a compass in a number of positions over the board, and see whether there is any connection between the direction of the curved lines and the direction of the needle. These lines indicate the direction of the magnetic force, and are called magnetic lines of force. Make drawings of these lines of force, indicating on the drawings both the north and south poles. Using combinations of magnets, determine the nature of the magnetic field in each case and make drawings of them.

Experiment 2. Mark one end of a knitting needle with a file for the sake of identification. Stroke it from end to end with the north pole of a horseshoe or bar magnet. Note its effect upon the compass. As we continue to stroke it with the magnet it produces greater effect upon the compass, until it becomes "saturated," when further stroking produces no change upon the compass. Drop the needle on the floor and test its effect upon the compass. Strike it several blows with a hammer and again test with the compass. The effect of the magnet upon the compass will be found to be lessened by jarring and striking.

Experiment 3. Magnetize a long darning needle. When the whole needle is dipped in iron filings, there will be found to be an appreciable effect upon the filings all along the needle. Break the needle in two parts and test the ends with the compass. Again break one of the halves and test again. It is assumed that a magnet consists of rows of molecular magnets arranged end to end.

Experiment 4. Note how much deflection one of the pieces of magnetized darning needle produces upon the compass. Then place it in a stirrup made of copper wire and heat to redness. When tested with the compass after cooling it will be found to give very little if any deflection of the compass. The heating sets the molecules of the metal in motion and they lose the magnetism they hold. If heated again and transferred while hot to a position between the poles of a horseshoe magnet, and then tested after cooling, it will be found to give considerable deflection on the compass.

Experiment 5. Hold a small steel nail between the poles of a horseshoe magnet so that it does not touch the magnet, and strike it several sharp blows with a hammer. When removed it will be found to be magnetized. Test the poles

with the compass, remembering that north pole attracts south pole, and repels north pole. Turn it end for end between the poles of the horseshoe magnet and strike several blows again. On testing with the compass it will be found that the poles have been reversed in the nail.

Lessons on terrestial magnetism may be drawn from this. The use of the compass by woodsmen, and mariners, etc.

VIII. Explanation of the electric bell. Induced magnetism. Movement of electric currents through conductors. Conductors and non-conductors.

Experiment 1. The electric bell is one of the simplest applications of the electro-magnet. When the button P is pressed the electric circuit is closed, and a current flows in at A, through the magnet, over the closed contact point C and out again at B. As soon as the current is established the electric magnet E becomes magnetized and pulls over the armature a, and E becomes demagnetized. The armature is thrown back against C by the elasticity of the springs which supports it. The contact is then made again, the current begins to flow and the process is repeated. The circuit is automatically made and broken, at the "make and break" C, and the hammer is set in rapid vibration against the gong. (An illustrative drawing of the electric bell can be secured at the supervisor's office.)

MATERIALS FOR A WORKING EXPERIMENT

I. Air and some of its characteristics:

Experiment 1.
1. Wide mouth bottle.
2. Water bucket.

Experiment 2.
1. Student lamp chimney (2).
2. Large cork.

Experiment 3.
1. Shallow pan.
2. U bent glass tube.
3. Wide mouth bottle.

II. Air has weight and causes pressure:

Experiment 1.
1. 250 cc. flask.
2. Cork to fit.
3. Spirit lamp.

Experiment 2.
1. Funnel (glass).
2. 1-holed stopper.
3. Bent glass tube.

Experiment 3.
1. 250 cc. flask.
2. 2-holed stopper.
3. Straight glass tube.
4. Bent tube.
5. Water glass.

Experiment 4.
1. Tallow candle.
2. Shallow pan.
3. Lamp chimney.

III. Expansion and contraction of liquids, etc.:
Experiment 1.
1. Flask.
2. 1-holed cork.
3. Straight glass tube.

IV. Cooling by Evaporation:
Experimen s 1, 2, 3, 4.
1. 4 oz. bottles.
2. Centrigrade thermometer.
3. Absorbent cotton.
4. Ether, alcohol, water.
5. Three porcelain dishes (cups will do).

V. Soil, and its water-holding capacity:
Experiment 1.
1. Shallow pan.
2. Student chimney.

VI. Work and working capacity:
Experiments 1, 2.
1. Meter stick.
2. Brass scales.
3. Support.
4. The household appliances listed in the outline.

VII. Magnetic fields and magnetism:
Experiments 1, 2, 3, 4, 5.
1. Horseshoe magnets (2).
2. Bar armature.
3. Bar magnet.
4. ½ lb. iron filings.
5. Small compass.
6. Knitting needle.
7. Nails.
8. Darning needle.

VIII. Electric bell:
Experiment 1.
1. Electric bell.
2. Push button.
3. 10 ft. insulated wire.
4. 1 dry cell.

REFERENCE BOOKS: Caldwell and Eikenberry, *General Science*, Ginn & Co.; Clark, *General Science*, A. B. Co.; Clark, *Laboratory Manual in General Science*, A. B. Co.; Lynde, *Physics of the Household*, Macmillan Co.; Brownsville, Fuller, Hancock, Whitsit, *Chemistry of Common Things*, Allyn & Bacon; Woodhull. *Simple Experiments in Physics*. Barnes.

HISTORY: PRIMARY GRADES

The present course of study presents some modifications of the old, both as to subject matter and method, but the outline offered here is by no means final. It simply represents what seems to be at the present time best adapted to the particular needs of our pupils.

The work of the earlier grades cannot with exactness be called history. It is rather a study of social situations, aiming to help little children to gain an intelligent grasp, as far as their capacity permits, of the great whole world in which they live. From a study of the near and immediate home relations with which they are familiar, they are led through the work of the father and mother to community activities which provide them with the necessities of life. The universal family idea is emphasized through strongly marked contrasts found in the home of the Eskimo and the home of Hiawatha.

In the second grade the elements of time and change are introduced through a study of selected types of primitive life. Constant comparison with present day life aided by concrete illustration helps the children to interpret the complex social life about them. Through studies of simple societies, using the primitive forms selected as typical and by comparison, the history aspect grows until in the third grade the children complete the cycle from the long ago past to the present. The remote takes on a new aspect in its relation to the near and immediate and this ever widening circle now termed local history includes not only the community, but the town, the state, and her neighbors. The sequence is from the present back to the past, then to the present, the sweep of the circle increasing in scope each year until there is developed from a vague, crude idea the definite elements of time, place, movement, and change which mark the beginnings of the historic sense.

The fourth grade begins a new cycle of work, based upon the local history of the previous grade, in answer to a natural question or problem which should arise, viz.: How, when, where,—did people in the old world find out about the new? For the first time a logical succession of events, each depending on the preceding, is presented beginning with the world history as it affected the colonization of Maryland and her neighbors. The European back-

ground of American history, the discoverers and explorers, and the colonists are treated in a simple manner, and the children are able to see the transplanted European change into an American. The children grow in historic judgment.

Vivid portrayal of accurate information regarding persons, places, events, and the common things of former times is the key to good history concepts. Concrete illustrations, through pictures, drawings, objects; constant comparison with present day conditions, feeding the imagination with authentic information to make more vital connection with the past, and at the same time placing the present in its right perspective is the province of history.

What the primary grades aim to give:

1. Orientation of the child in his environment.

2. Vague, crude beginnings of the historic sense developed as evidenced in the appreciation of the elements of time, place, movement, and change in relation to the historic concept.

3. Significant data full of accurate detail, plenty of color and warmth.

4. Simple problems, the solution of which to be gained through sufficient data already given. Mere guess work to be avoided altogether.

5. Correlation of geography and history facts.

6. Opportunity for oral composition and the dramatic effort as means to increase enjoyment and retention of historical data.

REFERENCE BOOKS: Committee of Eight, *The Study of History in Elementary Schools*; McMurry, *Special Method in History*, Macmillan; Johnson, *The Teaching of History in the Grades*, Macmillan; Dynes, *Socializing the Child*, Silver, Burdett.

FIRST GRADE

Socializing the Child. The work is not history in its true sense, but rather industrial history, which includes history, civics and social life; and its purpose is to socialize the child by presenting familiar and typical experiences in the home and environment which will enable children to grasp the idea of social interdependence through concrete illustration.

The conditions, activities, industries and occupations of the immediate environment provide the basis for the first year's work and much of the second. The common and familiar affairs of everyday life are thus made to seem worth while, are dignified by the serious consideration given them through sympathetic appreciation and

study. Much of the work in nature-study, hygiene and constructive activities is closely related to the social and industrial life, and as far as the children are concerned should form one unified whole.

The method used may be designated as informal discussion of simple problems within the scope of little children illustrated by means of pictures, blackboard drawings, stories told and dramatized, songs and games. Constructive work affords the opportunity for *doing* which goes hand in hand with the simple talks about common and familiar things. A summary of the method of procedure may be indicated as follows:

a. First-hand experiences in the home excursions, or dramatizations in the "make-believe" world at school.

b. Doing or making something in response to an apparent need —a child's problem.

c. Story-telling by the teacher. Dramatization by the children.

d. Informal talks with children, gathering facts—few and simple —in relation to some definite aim. Oral composition, both class composite and individual effort.

e. As children gain power to read, the Language Reading Unit based upon the oral composition or class story is used for reading.

f. Creative work with materials, in constructing, drawing, modeling, writing, furnishes opportunity for expression of ideas gained through first-hand everyday experience, through excursion, through story and dramatization, through songs and games.

Time allotment: This work closely correlates with Industrial Arts. Recitation: 15 minutes per day; 75 minutes per week. Seatwork: 15 minutes per day; 75 minutes per week. Industrial Arts: Three 30 minute periods per week. Total: 240 minutes per week.

OUTLINE BY TOPICS

I. The Home:

1. Members of the family.
2. Family pleasures.
3. Activities in the home.
4. Supplying material needs.
   a. Food.
   b. Clothing.
   c. Shelter.

II. Community activities:
1. Home furnishings.
2. Food.
3. Clothing.
4. Other community activities.

III. National holidays:
1. Thanksgiving.
2. Christmas.
3. St. Valentine's Day.
4. Washington's Birthday.
5. Maryland Day.
6. Easter.
7. Arbor and Bird Day.

OUTLINE BY MONTHS—SEPTEMBER, OCTOBER, NOVEMBER

THE HOME AND ENVIRONMENT

I. The Home:

1. The family:

a. Mother—her services upon which each member of the family depends.

b. Father—his services in the home and outside of the home to supply the needs of the family.

c. Children—ways in which they may help.

d. Other families, as a mother hen and her chicks; a cat and her kittens; a doll family.

Projects:

(1) Cut out paper dolls to represent family.
(2) Fold father's newspaper; the napkin; the window.
(3) Model ball with which baby plays.

Make dolls from raphia, clothes pins, or cardboard. As dolls are brought from home, simple problems will be proposed by the children, and their solution will furnish opportunity for natural, spontaneous discussion of social and civic relations. The handwork emphasizes the capacity to express ideas and feelings, and aids in breaking down formal presentation of dry facts.

2. Activities in the home:

a. Cooking meals, baking, marketing, breakfast, school lunch.
b. Washing and ironing clothes.
c. Making and mending clothes for school, for church, for other occasions.
d. Visiting and shopping.
e. Church and Sunday School.
f. Care of the yard.
g. Pets.
h. Playthings.
i. Games in the autumn.

Projects:

(1) Make booklet illustrating mother's work, children's games, pets, playthings.
(2) Washing and ironing clothes for school doll.
(3) Folding table cloth; a shawl for dolly on her shopping trip.
(4) A basket for lunch.
(5) Model playthings, pets.
(6) Begin the doll house.

3. Family pleasures.
   a. Evening and Sunday pleasures.
   b. Playing in the leaves.
   c. Gathering nuts.
   d. Hallowe'en fun.
4. Supplying material needs in the home-food:
   a. Home—what we eat.
   b. How our needs are supplied.
   c. Where the fruits and vegetables come from.
   d. What is seen in market.
   e. How mother prepares some fruits and vegetables for winter use: canning, preserving, making jelly.

REFERENCES: Bryant, *How to Tell Stories*, p. 141; Chamberlain, *How We Are Sheltered;* Chap. I; Gaynor, *Song Book*, pp. 7, 8, 13, 120; Lindsay, *Mother Stories*, pp. 7, 8, 13, 120; Lindsav, *Mother Stories;* pp. 47, 125; *Stories*, pp. 23, 25, 31; Poulsson, *Child's World*, pp. 174, 282, 321; *Finger Plays*, pp. 40, 73; Wood, *Children's First Story Book*, pp. 8, 27; Dynes, *Socializing the Child*, pp. 74–97.

II. Community Activities:

1. The farmer or gardener. Excursion to a farm: the farmhouse, the barnyard, and farm animals, the farmer's fall work, gathering and storing vegetables and fruits, marketing.
2. The grocery or market. Excursion to the market.
3. The baker. Story of a grain of wheat to a loaf of bread.
4. The milkman. Story of the milk.

Projects:

(1) Model fruits and vegetables.
(2) Farm on sandtable.
(3) Make a grocery store or bake shop.
(4) Model the essential food products.
(5) Make a booklet showing the story of the bread, the story of milk, using cutting, drawing and folding and writing.
(6) Visit a farm in the fall.

REFERENCES: Bigham, *Mother Goose Village*, p. 49; Bryant, *Stories to Tell to Children*, pp. 7–8; Chamberlain, *How We Are Fed*, p. 7; Chance, *Little Folks of Other Lands*, p. 15; Gaynor, *Song Book*, p. 10, 64; Lansing, *Rhymes and Stories*, pp. 16, 26; Poulsson, *Child's World*, p. 82–90; *Finger Plays*, p. 66; Wood, *Children's First Story Book*, pp. 32, 34; Wiltse, *Kindergarten Stories and Morning Talks*, pp. 31, 119.

III. National Holidays:

1. Thanksgiving:

a. Nature's preparation for winter; animals, squirrels, nutting party, robin's farewell, pony's new coat; trees; autumn leaves, baby buds; plant's seed babies, bees in the hive.

c. Hiawatha: the Indian boy; his home, his grandmother, his food, clothing, his friends, his games, his bow and arrow, his hunt, and the Thanksgiving.

b. Thanksgiving: a harvest feast. How we celebrate the day—getting ready for Thanksgiving, going to grandmother's, the Thanksgiving dinner, Thanksgiving games. Story of the First Thanksgiving.

Projects:

(1) Hiawatha's home on the sand table.
(2) Model fruits and vegetables for Thanksgiving dinner; animals of the forest; fowls of the barn yard.

(3) Make a booklet of cuttings, drawings, foldings, including written work of the story of Hiawatha; of Thanksgiving.

(4) Use the pumpkin or apple as a unit in making an invitation to the festival.

(5) A Thanksgiving feast; a nut, a cookey. Each child makes a basket and folds a tiny napkin.

(6) Each child contributes a potato or an apple to a community basket for some family less fortunate than their own.

REFERENCES: Gaynor, *Song Book*, p. 67; Poulsson, *Child's World*, pp. 93, 94, 97; Smith, *Music Primer*, pp. 9, 44, 59; Wiltse, *Kindergarten Stories and Morning Talks*; Wiggin and Smith, *Story Hour*, p. 107; Dynes, *Socializing the Child*, pp. 121–128.

DECEMBER

I. The Home:

1. Activities in the home:

a. Getting ready for winter; heat; fire in school, at home; change in house furnishings; change in dress; winter clothing. Choosing clothing suitable to season.

b. Why wool is best in winter and cotton for summer.

c. Use of silk in both seasons. Recognition of all three textiles through handling.

d. Care of clothing at school and home.

e. Simple story of wool from sheep to store.

II. Community Activities:

1. Visit the department store: dry goods—My new dress.

2. Visit the shoe store and the shoemaker—A new pair of shoes. A hole in a shoe.

Projects:

(1) Make a doll's dress of cotton and a cape of wool; patterns to be made by the children before cutting and sewing.

(2) Mount a piece of each textile on a card and name each.

(3) Model, cut, draw the sheep, and shoemaker's tools.

REFERENCES: Chamberlain, *How We Are Sheltered*, pp. 157, 167; Grover, *Sunbonnet Babies, Outdoor Primer*; Poulsson, *Child's World*, pp. 25, 32, 201, 208; *Finger Plays*; Dynes, *Socializing the Child*, pp. 87–89.

III. National Holidays:

1. Christmas.

a. Getting ready for Christmas—making gifts; Christmas shopping.

b. Our Christmas customs

c. Santa Claus: home, work, helpers.

d. The Christmas tree, decorations.

e. Christmas toys.

f. Christmas party.

Projects:

(1) Make Christmas gifts: for mother, a calendar; for father, a blotter or shaving pad; for some child, a stick of candy, a doll.

(2) For the Christmas tree: chains of paper, popcorn, cornucopias, birds, etc.

(3) To help Santa Claus, bring something old or new: a toy or an article of clothing for the community gift to some worthy family.

REFERENCES: Gaynor, *Song Book*, pp. 26, 27, 28, 29; Proudfoot, *Child's Christ Tales*; Poulsson, *Child's World, Finger Plays*; Wiggin and Smith, *Story Hour*.

JANUARY

I. The Home:

1. Shelter—the home as the abode of the family.
   a. Location depends upon nearness to business and school.
   b. Amount of light, air, and sunshine.
   c. Beauty of surroundings.
   d. Parts of the house: hall, parlor, sitting room, dining room, kitchen, bedroom and bath.
   e. Materials: wood, brick, stucco, cement, iron.
2. Activities in the home:
   a. Furnishings: furniture, rugs, curtains, etc.
   b. Care of the house: sweeping, cleaning, dusting, airing the bedding and bedrooms, etc.
   c. Visits in the home: afternoon calls, spending the day.

II. Community Activities:

1. The carpenter: work that he does, tools, materials, value of service to people. Importance of honest and careful work.
2. The mason: work that he does, tools, materials.
3. The paper hanger: the store, what the paperhanger does.

Projects:

(1) Make the individual room for the doll house of cardboard, or use an ordinary soap-box, and work toward the furnishings, the paper for the walls, rugs for the floors, furniture, dishes, pictures, etc. If the room for the doll house was made earlier and much toy furniture had been brought from home, these can now be displaced with complete sets of children's own handwork, using clay, tinfoil, papercloth, rug yarn, and other materials suggested by the children.

REFERENCES: Poulsson, ***Child's World.***

4. The little Eskimo, from a home in the cold land.
   a. His home.
   b. His food
   c. His dress
   d. His toys, and games.
   e. His long day and night.
   f. His journeys with sleds and dogs.

Projects:

(1) Eskimo home on sandtable.
(2) Model in clay the igloo, Eskimo boy, and dogs.
(3) Fold a simple sled.
(4) Dress a doll in fur.
(5) Make a booklet showing our home; Hiawatha's home; the little Eskimo's home; the dress of each; the food of each. Cuttings, drawings, foldings, and simple written work will tell the story.

REFERENCES: Peary, ***The Snow Baby***; Smith, ***Eskimo Stories***; Dynes, ***Socializing the Child***, pp. 119–121.

FEBRUARY

I. The Home:

1. Family pleasures in the home:
   a. Birthday celebrations. A little child's party.

b. Stories told of brave deeds. "How Cedric Became a Knight."

Projects:

(1) Celebrate the birthday party of some child; fold and decorate napkins and tiny plates; cutting candles for birthday cake; serve a tiny mint and cracker.

(2) Drawings: cuttings and modeling to illustrate the story of Cedric—castle, spears, horses and knights; kitten and cup.

REFERENCES: Harrison, *Cedric in Storyland*; *Month by Month*; *Winter*, pp 219, 220; Poulsson, *Child's World*.

II. Community Activities:

1. St. Valentine's Day. Story of the good saint, who he was, what he did; his messages, his birthday; how we celebrate the day.

2. Postman: what he does; his uniform; the mailbag; the mailbox.

3. Policeman: his care of children; his uniform; his district.

Projects:

(1) A simple valentine with its message of love, the envelope, and postman's cap to be worn in the postman game.

(2) Illustrations of the postman's bag; cap, letter box, mail car.

REFERENCES: *Kindergarten Chimes*, p. 113; Poulsson, *Child's World*, pp. 209, 215; *Plan Book*, February (Intermediate), pp. 727–731; *Plan Book*, February (Primary), pp. 607–608.

III. National Holidays:

1. Washington's birthday:

a. The little boy: home, parents, brothers and sisters, playmates, dogs and horses; flower bed story.

b. Our flag: what it means; where we see the flag.

Projects:

A badge of red, white and blue to be worn on Washington's birthday.

REFERENCES: Dole, *American Citizen*; Harris and Cooley, *Field Readers*, pp. 16–24, 26–27, 30, 38; Gaynor, *Song Book*, pp. 32, 34; Poulsson, *Child's World*, pp. 191, 197.

MARCH AND APRIL

I. The Home:

1. Nature's preparation for spring's awakening—

a. Winds and what each brings. What winds do in autumn; in winter; and in spring.

b. Rain: water—how we get water in the home: pump, faucets, in the streets—hydrant: in the park, the fountain; in the fields, brooks, pond, or lake. What we do on rainy days; what we wear; games we play.

c. Sun: What we do on sunny days. How sun helps the spring flowers as pussy willow, windflower, tree buds.

2. Activities in the home:

a. Spring housecleaning: What mother is doing in the house; what father is doing in the yard, garden or field; how children help—cleaning yard, etc.

II. Community Activities:

1. The street cleaner: What he does, his dress, his tools, how we may help.

2. The park gardener: What he does, when he begins his work; care of flower beds and lawn.

3. The garbage man: Care of refuse, ashes, waste: carts, dumping ground, burning, etc.

4. The ice man: His load of ice, uses made of ice in summer; when and where ice is made.

Projects:

(1) Pinwheels for pleasurable uses. Drawings, cuttings, etc., to illustrate.

(2) Fold umbrella for doll. Drawings, cuttings, modeling to illustrate.

(3) Making rugs for the doll house to freshen it for the spring.

(4) Fold, cut, model; tools used in spring cleaning.

(5) Visit the park gardener and observe his work.

(6) Form committees for keeping the yard and street free from paper and refuse.

REFERENCES: Hill, *Lessons for Junior Citizens*; Dole, *American Citizen*; Grover, *Outdoor Primer*; Poulsson, *Child's World*, pp. 25–32, 51–54; Wood, *Children's First Story Book*, pp. 17–24; Wiltse, *Kindergarten Stories and Morning Talks*, pp. 27, 28, 51–54.

III. National Holidays:

1. Maryland Day: Simple story of the Ark and the Dove. Our state's birthday.

2. Easter: The awakening of new life we can present through the Easter lily or bulb, or the chick hidden in the dark cell. Show the dark brown bulb, then the lily. Let children watch the bulb which grows in water. Easter customs; the rabbit.

3. Arbor Day: Children take part in the treeplanting. Sing spring songs. Recite spring poems.

4. Bird Day: Children take part as above.

Each of these days should give the opportunity to direct and continue the observation of trees and birds in the yard, street, neighborhood—as the pussy willow, the hen and chicks, the robin.

Projects:

(1) Make a badge of yellow and black to wear on Maryland Day.

(2) Observations of bulbs grown in dish or bulb glass.

(3) Model rabbit, chicks, eggs. Drawing, cutting, folding to illustrate awakening life.

(4) Visit a tree in the year.

MAY AND JUNE

I. The Home:

1. Family pleasures:

a. May Day: Gathering flowers, going where flowers are found.

b. The circus: Going to the circus; the parade, the tents; the animals from cold lands and hot lands, the largest animals, the fierce animals; care of animals.

c. Making May baskets.

d. Spring games. Boys: marbles, balls, or tops. Girls: playhouse, dolls. Boys and girls: swing, hoop, dancing, games.

2. Activities in the home:

a. Garden and field; the vegetable garden; how the ground is made ready; the planting, care of garden tools.

b. Animals on the farm. Barnyard fowls; the hen and chicks; the little pigs; the calf; the pony; the pet dog. Story of animals teaching respect for animal life and use to man

4. Spring and summer clothing:
   a. What we wear; compare with our winter dress.
   b. Spring sewing.
5. Vacation time.
   a. Getting ready for a vacation; a visit to the country, to the mountains or the se shore.
   b. Going down town with mother to buy clothes ready made; hats, shoes, hose, etc.; cloth for dress, kinds of material; making clothes. Packing trunk for trip.
   c. The journey, the ticket, checking trunk, seat in the train, sights from the car window.

Projects:

(1) Go a Maying; make baskets and fill with flowers to give some shut-in in the neighborhood.
(2) Drawings, cuttings, foldings to illustrate spring work; spring pleasures.
(3) Make a circus book.
(4) Make a book of animals on the farm.
(5) Help the children to make a class song about birds, trees, pets, or activities about them.
(6) Make a trunk and fill it with doll clothes.
(7) Sandtable scene of a farm.
(8) Visit a farm in spring.

REFERENCES: Bailey and Lewis, *For the Children's Hour*; Bryant, *How to Tell Stories*; Grover, *Sunbonnet Babies; Overall Boys*; Harris and Cooley, *Field Reader*; Holton, *Primer*, Poulsson, *Child's World; Finger Plays;* Wiltse, *Kindergarten Stories and Morning Talks.*

SECOND GRADE

Social and Industrial Life. The work of the second grade is not history in its true sense, but rather the social and industrial history which includes history, civics, and social life; and its purpose is to socialize the child by presenting familiar typical experiences in the home and environment which will enable the children to grasp the idea of social interdependence through concrete illustration.

The familiar experiences deal chiefly with the fundamental needs of man: food, clothing and shelter, and since these activities are a part of the child's environment are easily approached from his native interests, and are related to the evolutionary and historical standpoint through the study of primitive life. Modes of living among people of primitive conditions will be contrasted and compared with present day modes. Two sets of conditions far apart in time are thus introduced and by comparison the concepts of time and change are gradually developed, becoming more significant in the succeeding grades. This work forms a foundation for the

local history of the third grade. Celebration of national holidays gives opportunity for historical facts which are important in developing patriotism. All the work aids in forming national ideals.

Children living in city surroundings need to study types of industries and activities in the environment in their relation to country life, and should become familiar with country life through excursions, visits, pictures, and helpful discussions.

Children living in the country need to study types of activities in the environment in their relation to city life, thereby becoming familiar with significant phases of city life by the same means. The starting point, is, therefore, dependent upon the needs of the children. The aim is to make concrete the unfamiliar, and to use the known for purposes of comparison.

Method. The method used may be designated as informal discussion of simple problems within the scope of little children, illustrated by means of pictures, blackboard sketches, stories told and dramatized, and songs and games related to industrial activity. Constructive work affords the opportunity for *doing* which goes hand in hand with the simple talks about common and familiar things. A summary of the method of procedure may be indicated as follows:

a. First hand experiences in the home and community, excursions and dramatizations.

b. Setting a problem through doing or making something in response to a need which to the children seems valid.

c. Informal talks with children, collecting and arranging facts in relation to the problem. Oral composition, both class composite and individual effort.

d. Language-reading units based upon the oral composition.

e. Creative work with materials in constructing, drawing, modeling, writing, furnishes opportunity for expression of ideas gained through first-hand every-day experience, through excursion, through story and dramatization, songs and games.

Distribution of Subjects by Months:

September: Present Day Life. Individual Needs. Food.

October: Present Day Life. Individual Needs. Shelter.

November: Present Day Life. Individual Needs. Continued. Thanksgiving.

December: Present Day Life. Individual Needs. Clothing. Christmas.

January: New Year.
Primitive Life. Tree Dwellers and Cave Men.

February: Eskimos.
St. Valentine's Day.
How We Hear From Our Friends: Postman.
Lincoln's and Washington's Birthdays.
Our Flag.

March: Indians of Forest and Plain.
Maryland Day.

April: Pueblos and Cliff Dwellers.
Arbor and Bird Day.
Present Day Life. Protection: Our Policeman and Firemen.

May: Present Day Life. Service:
Street Cleaning and Water Supply.

June: Present Day Life. Pleasures:
Our Parks and Playgrounds.
Our School.

Activities in country contrasted with city and town life.

N. B.—This work closely correlated with Industrial Arts.

Time allotment: Recitation: 15 minutes per day, 75 minutes per week. Seatwork: 15 minutes per day, 75 minutes per week. Industrial Arts: Three 30 minute periods per week. Total 240 minutes per week.

PRESENT DAY LIFE

Outlined by Topics—September–January)

I. Community Activities in relation to Individual Needs:

1. Food.
   a. Kinds.
   b. Farm life in relation to city needs.
   c. The grocery and market.
2. Shelter.
   a. Materials.
   b. Builders: the carpenter.
   c. Furnishings.
3. Clothing.
   a. Materials.
   b. Stores.
   c. Tailor and dressmaker.

II. Community Activities in relation to Community Needs: city, village, country.

1. Protection.
   a. Police.
   b. Fire.

2. Service.
   a. Street cleaning.
   b. Water supply.
   c. Lighting.
3. Pleasure.
   a. Home yards and school playgrounds.
   b. Parks and playgrounds.
4. Education.
   a. Our schools.
   b. Our church.
5. Transportation and communication.
   a. Ways of travel.
   b. Engineer, conductor, motorman.
   c. Postman.

PRIMITIVE LIFE

(Outline by Topics—September–January)

A. Tree Dwellers and Cave Men, The Ages of Fear and Combat.
B. Indians; The Hunting Stage.
   1. Indians of the forest and plain.
   2. Pueblos or Cliff Dwellers; Farmer Indians.
   3. Eskimos: Alaskan Indians and from the tundras of the far North.

I. Community Activities in relation to Individual and Community Needs:

1. Food.
2. Shelter.
3. Clothing.
4. Protection.
5. Education.
6. Transportation.

Studied in sufficient detail, and by comparison with present day activities.

NATIONAL HISTORY STORIES

I. Holidays:

1. Thanksgiving.
2. Christmas.
3. St. Valentine's Day.
4. Washington's Birthday.
5. Lincoln's Birthday.
6. Maryland Day.
7. Arbor and Bird Day.

PRESENT DAY LIFE

(Outlined in Detail—September–January.)

A. Community Activities in relation to individual needs.

I. Food:

1. Farm life in relation to city needs; garden, farm, orchard.
2. Grocery and market in relation to needs of both town and country people.

a. Kinds: plants, roots, stems, leaves; fruits from vines, trees, bushes; from far-away lands.

Animal: flesh, fowl, sea-food; tame, wild.
Mineral salt.

b. Sources: garden, farm, dairy, orchard.

c. Preparation of foods: raw, cooked; waste.

d. Preservation and storage: home, farm, factory; cold storage; the ice-box, the ice-man.

c. Transportation to city: wagon, train, boat; from market, trolley, market wagon, baskets.

Projects:

(1) Excursions to a farm in the fall, to a nearby market or grocery store, furnish the basis for intelligent work.

(2) Simple problems are presented which involve the above facts, as: What does the farmer raise for us in his garden? Market Day and what we would see there. Making jelly. The potato cellar. The orchard in the fall. Going to market.

3) Illustrative and manipulative work with clay, paper, and nature materials. See Industrial Arts.

(4) Farm on sandtable.

REFERENCES: Bryant, *How to Tell Stories; Marjorie's Garden;* Chamberlain, *How We Are Fed*, pp. 18, 32–38; Dodge, *Home Geography*, p. 11; Perdue and Griswold, *Language through Literature, Nature and Art*, pp. 60, 62; Poulsson, *Child's World*, pp. 82–90; Wiltse, *Kindergarten Stories and Morning Talks*, p. 31

II. Shelter:

1. Uses, protection against weather; home of family, of many families, as apartment house; protection of family property.

2. Kinds: summer homes, winter homes; location, light, air, protection.

3. Materials: wood, brick, stone, cement, iron and steel.

4. Care of home: sweeping and dusting, airing; care of furnishings.

5. Builders: carpenter, mason, plumber, electrician.

6. Heating and lighting: coal dealer, miner.

7. Our home comforts.

8. The carpenter and his work:

a. Vi it a house being built in the neighborhood. Note the tools, lumber, nails, and kinds of work done.

b. Discussion of work and of tools used.

REFERENCES: Poulsson, *Child's World*, pp. 51–54; Wiltse, *Kindergarten Stories and Morning Talks*, pp. 27, 28, 51–54.

9. The Miner and his work:

a. Pictures of a mine, a miner and his tools. Show how the coal is taken from the mine, how transported, how brought to our doors.

b. Tell the story of a lump of coal.

Projects:

1. Collections of stones, minerals.

2. Manipulative work: Cutting, drawing, modeling tools used by carpenter and miner or other contributor to the home.

3. Committees appointed to do specific housekeeping.

REFERENCES: Chamberlain, *How We Are Sheltered*, pp. 159, 167; Poulsson, *Child's World*, pp. 25, 32, 201, 208.

III. Clothing:

1. Uses, protection, adornment.

2. Materials, for summer, winter, source, manufacture.

3. Care: cleaning, laundering, mending, pressing, airing. Clothes moth.

4. Making: in the home, dressmaker; outside the home, tailor, shoemaker, milliner.

Projects:

(1) Visits to the tailor, shoemaker, or milliner.

(2) Simple problems, as The Story of John's Coat, Getting Rid of Clothes Moths, A Necklace, Shoes That Pinch, Our Laundry, and others.

(3) Illustrative and manipulative work. See Industrial Art.

(4) Collections of material; of pictures.

REFERENCES: Chamberlain, ***How We Are Clothed***; Poulsson, ***Child's World***.

NATIONAL HOLIDAYS

(Outlined in Detail—September–January)

I. Thanksgiving:

1. The story of the Pilgrims: in Holland; voyage in the Mayflower across the ocean; landing at Plymouth Rock; the first winter, shelter, food, clothing, friends, hardships.

2. The First Thanksgiving: the harvest, preparation for the feast, guests; story of Lady Yeardley's Visitor.

3. Our Thanksgiving customs; preparation for the feast, family reunions, children's games.

Projects:

1. Thanksgiving celebration, consisting of autumn songs, poems, stories and dramatization.

2. Booklet containing best illustrative and written work of the class.

3. Illustrative and manipulative work with clay and papers. See Industrial Arts.

REFERENCES: Bailey and Lewis, ***For the Children's Hour***; Poulsson, ***Child's World***; ***Plan Book***, November; Wiggin and Smith, ***Story Hour***.

II. Christmas:

1. Christmas in Holland; preparation made by parents, by children; St. Nicholas.

2. Christmas toys: How a doll is made; History of toy soldiers.

3. Our Christmas customs: Christmas shopping; helping Santa Claus; Christmas tree; decorations; Christmas celebrations.

4. Christmas gifts: Instill the joy of giving. The toy bag—children bring old toys for those less fortunate than themselves. Broken old toys should be mended. The Children's Hospital, Home for Crippled Children, and other orphan asylums are glad to receive such bags.

Projects:

1. Making Christmas gifts for mother and father.

2. Decorating a Christmas tree for some one in the community.

REFERENCES: ***Month by Month***, December; ***Plan Book***, December; Proudfoot, ***Child's Christ Tales***; Patton, ***The Year's Festival***.

III. New Year:

1. Name of old year.
2. What holidays it brought.
   Our holidays.
3. Name of New Year.

4 What it will bring.
a. Holidays.
b. Seasons.
c. Months.
d. Days.

REFERENCES: *Our Holidays*, The Century Co.; Poulsson, *The Fairy's New Year's Gift. The Child's World.*

PRIMITIVE LIFE

(Outlined in Detail—January–April)

A. Community activities in relation to individual needs.

I. The Tree Dwellers:

1. Homes: in trees.
2. Food:
a. Kinds: plants, fruit, bark, leaves, roots, buds.
Animals: Birds' eggs, smaller animals; later, a few large animals.
b. Source: growing wild on wooded hills.
c. Aids in food-getting: hands, teeth, things at hand.
d. How eaten: before discovery of fire, raw; after discovery of fire: raw and roasted in hot ashes.
3. Clothing: skins, leaves fastened with thorns.
4. Tools, and weapons: hands, teeth, sticks, stones.
5. Enemies: animals, fire, floods, storms.

II. The Fire Clan: The Age of Combat.

1. Homes: brush huts near the fire.
2. Food: cooked meat, berries, roots, nuts, etc.
3. Tools and weapons: pitted stones and chipped stones tied with sinews to clubs.
4. Enemies: animals, floods, storms.
5. Fire now worshipped as a friend and helper.

III. The Cave Men:

1. Homes: caves, the homes of former animals.
2. Food and clothing similar to that of the Tree Dwellers.
3. Tools and weapons: clubs, axes of pitted and chipped stones fastened to clubs with sinews and the bow and arrow.
4. Enemies: animals, floods, cold, jealous people.
5. New inventions: fire from flint or friction, splint and rush baskets, designs and colors for baskets, and the bow and arrow.
6. Taming animals: the goat, the dog.
7. Occupation: mother and girls; preparing food, gathering food, making baskets; sewing. Father and boys: protecting the family, hunting. Children's work and play: school, drawing pictures, making a bow, spear.

Projects:

1. Sand table representation.
2. Problems: See Dopp.
3. Making simple tools; making fire from flint.
4. Illustrative and manipulative work. See Industrial Arts.

REFERENCES: Dopp, *The Cave Boy; The Tree Dwellers*; McIntyre, *The Cave Men.*

IV. The Eskimos:

1. Homes:
   a. Kinds: igloo, summer and winter home.
   b. Materials: rooms.
   c. Heating and lighting.
   d. Care and comforts.
   e. Compare with our homes; with homes of other primitive people.
2. Food:
   a. Kinds: plants, moss, berries. Animal: reindeer meat and milk, birds' eggs, walrus blubber, whale oil, fish.
   b. Sources: frozen seas, rocks, and hills.
   c. How eaten: boiled, raw, frozen, baked.
   d. Utensils: bone, stone.
3. Clothing:
   a. Kinds: skins of animals: polar bear, seal, walrus.
   b. Making leggings, boots, jumper, hood.
   c. Tools: scraper, needle of bone.
4. Occupation: Mother and girls, preparing food, making clothes.
   Father and boys: hunting with bow and arrow, fishing with harpoon and spear.
5. Games: ball and cup: antlers. story-telling.
6. Their day and night: the land of the long night.
7. Modes of travel: sledges and dogs, boats.

Projects:

1. Sand table scene consisting of representative work made by children.
2. Dramatization of Eskimo games.
3. Making booklet containing stories and illustrative work.

REFERENCES: Chance, *Little Folks of Other Lands*, pp. 23–26; Chase and Clow, *How We Are Clothed*, pp. 12–20; *How We Travel*, pp. 97–113; Carroll, *Around the World, I*, pp. 9–40; Dutton, *Hunting and Fishing*; Dopp, *Place of Industries in Elementary Education*, pp. 32–35, 121–155; Fox, *Indian Primer*, pp. 68–95. Smith, *Modern Music Series*, Primer, p. 50; Smith, *Eskimo Stories*; Shaw, *Big People and Little People in Other Lands*, pp. 62–69; Schwatka, *Children of the Cold*. pp. 9–212.

NATIONAL HOLIDAYS

(Outlined in Detail—January–April)

I. St. Valentine's Day.

1. Origin of the custom, or the story of the good saint.
2. How observed:
3. Meaning—message of love and good cheer.
4. Carrier pigeons.
5. Message stick of primitive people compared with modern telegrams and telephones.

II. Lincoln's Birthday:

Lincoln, the boy.

1. Home: pioneer; brothers and sisters.
2. First school days.
3. Stories showing kindness.

III. Washington's Birthday:

Washington, the boy.

1. Home: Playmates and friends.
2. School days.
3. Story of the colt.
4. Recall the garden story.

IV. Our Flag:

1. What the colors of the flag mean.
2. Days on which the flag is used.
3. Where they are hung.
4. Why we should love our flag.
5. Salute to the flag.
6. "I know three little sisters."

Projects:

1. Make a valentine and simple envelope.
2. Make a message stick.
3. Illustrated booklet of Washington, the boy.
4. Cut and color a flag.

REFERENCES: Bass, *Pioneer Life*, p. 79; Bigham, *Mother Goose Village*, pp. 146, 169; Educ. Pub. Co., *Child Stories of Great Men;* Harris and Cooley, *Field Reader*, pp. 10–24, 26, 27, 30, 38; Mabie, *Heroes Every Child Should Know;* Pratt, *Colonial Children*, p. 221; Poulsson, *Child's World*, pp. 196–197; Richmond, *Second Reader;* Wilson, *Nature Reader, I*, pp. 132–135; *Nature Reader, II*, pp. 162, 164, 170; Wiggin and Smith, *Story Hour*, pp. 123, 155; Smith, *Modern Music Series, I*. pp. 15, 16, 22, 41, 49, 54; *St. Nicholas*; *Our Holidays.*

PRIMITIVE LIFE

(Outlined in Detail—January–April)

I. Indians: Forest and plain.

1. Our country as it is now.
2. Appearance of our country when inhabited only by Indians
3. Home.
   a. Compare wigwam with our homes.
   b. Family: chief, squaw, brave; children—babyhood; boyhood, school games.
4. Dress:
   Preparation of skins: decoration; dyeing and wearing of cloth; head dress, moccasins, beads.
5. Food:
   a. Kinds: roots, berries, nuts, barks, plants, animals, birds.
   b. Means of securing food: digging, gathering, hunting, fishing, later, planting.
   c. Primitive agriculture: digging stick; gardens.
   d. Preparation of food: cooking, drying.
   e. Discovery of fire: methods of working; rubbing, percussion; effect on home life.
   f. Utensils: pottery and basketry.
   g. Transportation: baskets, carrying band.
   h. Exchange or trade: money, wampum, shells.

6. Occupation:

a. Mother and girls: building wigwam, planting grain, pounding corn, preparing food, dressing skins, washing clothing, making baskets, bearing burdens.

b. Father and boys: hunting with bows and arrows; fishing with nets and traps; making nets, canoes, pottery, wampum.

7. Means of communication:

Picture-writing; messengers; story-telling; games, dancing.

8. Modes of travel: ponies; trails; canoes, litters.

REFERENCES: Bass, *Pioneer Life*, pp. 1–12; Carroll, *Around the World II*, Chapter I; Fox, *Indian Primer;* Chamberlain, *How We are Sheltered*, pp 32–41; Chance, *Little Folks of Many Lands*, Chapter I; Husted, *Stories of Indian Children*; Judd, *Wigwam Stories*; Mason. *Women's Share in Primitive Culture, Origin of Inventions;* Pratt, *Stories of Colonial Children*, pp. 34–50. 105–54, 191–196; Shaw, *Big People and Little People of Other Lands;* pp. 103–109; Schwarz, *Five Little Strangers*, pp. 7–39, 69–70; Snedden, *Docas, the Indian Boy.*

II. Indians: Pueblos, or Cliff Dwellers:

1. Picture the country; cliffs, valleys, plains.

2. Home of the cliff-dwellers:

a. Construction of the house: material, labor involved, rooms, size, characteristics.

b. Groups of homes: the Pueblo village.

3. Occupation: pottery, weaving, agriculture.

4. Things made: bone needle, thread of yucca fibre, arrows of reed, stone axes, drinking cups, vases, lamps, baskets.

5. Enemies and dangers: the watch tower, and uses.

6. Communication and transportation.

REFERENCES: Bayliss, *Lolami;* Wiley and Edick, *Children of the Cliff.*

PRESENT DAY LIFE

(Outlined in Detail—April.)

B. Community activities in relation to community needs:

I. Our Community: Protection. How we are protected:

1. Our policemen.

a. Duties: to protect life and property, to prevent accident; loss, wrongdoing; to help people to obey the laws.

b. Uniform: badge, club, plain clothes.

c. Men employed in crowded streets (business); in parks, along harbors, on residence streets.

d. How to call the police station.

e. How to help: by doing right ourselves; by telling others of our laws; by reporting wrong-doing.

2. Our firemen:

a. The firemen in our district.

b. Duties of a fireman: to help save life and property.

c. Locate the nearest alarm box and hose house.

d. How can we help to prevent fires?

e. Why we have a fire drill.

Projects:

(1) Illustrative work: cutting, drawing, modeling.

(2) A walk to the nearest hose house.

(3) Collections of pictures showing bravery of firemen.

(4) Proper care of waste about school grounds and in street.

II. Our Community. Transportation and Communication.

1. How we travel.

a. Our motorman and conductor, engineer: duties, uniform, how we can help, dangers to be avoided.

b. Means of travel in the country and city: wagon, carriage, jitney.

c. The livery barn. The auto garage.

Projects:

(1) Collections of pictures illustrating modes of travel.

(2) Manipulative work: folding a barn or wagon, modeling an automobile, cutting a trolley car, carriage.

(3) Helping little children to avoid dangers.

2. How we hear from our friends:

a. Our postman: duties, uniform, mail box, mail car, postoffice.

Projects:

(1) Manipulative work: folding a postman's cap and bag.

(2) Playing the postman game.

(3) Writing a letter to the postman.

(4) Making a Christmas gift for him.

IV. Our Community: Housekeeping. How our streets are kept clean:

1. Street cleaning:

a. Need: to take care of waste; to remove snow; to lessen accident, to make ity more healthful.

b. Equipment: brooms, carts, shovel and pick.

c. Duties of sweepers: to sweep his section as many times each day as necessary; of drivers: to collect and carry away all forms of waste; of sprinklers: to keep the street from dust.

d. Waste: what it is and where it is taken.

e. Garbage and what becomes of it.

f. How we can help.

2. Our water supply:

a. Need: for drinking purposes, to protect from fire; for bathing, for lawns in summer.

b. How water is furnished in the city home; in the country home: pump, faucets, pipes; how water is supplied to the city: underground pipes, hydrant; in city streets, in the parks, public fountains, artesian wells in country, windmills, pumps.

c. Rain: in streets and gutters, in fields and gardens.

Protection from rain: rubbers, umbrella, raincoat.

Projects:

(1) Proper disposal of banana skins, and waste food. A clean street brigade.

(2) Manipulative work: folding the drinking cup.

(3) A walking trip around a square.

3. Our parks and playgrounds:

a. Need: air, light, play, space, school-playgrounds; home—yard, open square, large park, open field.

b. Care taken : the work of the park gardener.

c. How we may help.

Projects:

(1) Excursion to the park.

(2) Booklet containing illustrations and stories of the park or playground.

4. Our school:

a. Need:

b. Name, kind, elementary or high, location, number of rooms, children, teachers.

c. Care of school property.

d. How we can help to make our school beautiful.

Projects:

(1) Committees under the leadership of an older pupil to keep the grounds neat and attractive.

(2) A "Shrine of Beauty" in the schoolroom.

REFERENCES: Chamberlain, *How We Are Sheltered*, p. 157–167; Chase and Clow, *Stories of Industry*, Vol. pp. 5–24, 67–100; Dole, *American Citizen*; Poulsson, *Child's World*, pp. 209–215; Hill, *Lessons for Junior Citizens*; Smith, *Modern Music Series*, Primer. pp. 22, 88; Yerkes, *Our City*; Wiltse, *Kindergarten Stories and Morning Talks*, pp. 40–41; Wood, *The Children's First Story Book*, pp. 50–51.

NATIONAL HOLIDAYS

(Outlined in Detail—Spring.)

I. Easter:

1. Awakening of spring: observation of trees: pussy willow, maple, poplar.

2. Observation of flowers: crocus, violet, snowdrop.

3. Flow of sap, maple-sugar making time.

II. Maryland Day:

Simple story of the Ark and the Dove: Settlement at St. Mary's and the friendly Indians.

III. Arbor and Bird Day:

Tree planting observed, protection of birds.

PRESENT DAY LIFE

I. The farm and garden:

1. Spring work on farm and garden contrasted with fall work; preparation of ground, tools used, planting, care, aid of sun, wind, rain.

REFERENCES: Bryce, *Aldine Second Reader*, p. 17; Grover, *Outdoor Primer*. pp. 44, 50, 56; Harrison, *In Storyland*, p. 198; *Maryland Year Book*; Passano, *Maryland History Stories*.

THIRD GRADE

Local History. The work of the second grade aims to socialize the child by presenting familiar and typical experiences and to develop the concepts of time and change through two widely differing sets of conditions—the modern and the primitive. This forms a basis for the local history of the third grade. The children do not find it difficult to pass from the immediate present in their own locality to a remote past, and this ever widening circle of experience includes the beginnings of true history. For the first time a logical

sequence of events, each depending upon the preceding, is presented. The sequence is from the present back to the past, then to the present, the sweep of the circle increasing in scope each year until there is developed in a crude way the elements of time, change and movement which mark the beginnings of the historic sense. The work, then, of the first three grades forms one cycle.

Local history contains a natural interest and reality which makes it possible to extend the line of vision beyond the home, town and neighborhood to the county, state, and to a limited extent, to neighboring states. The national holidays give opportunity to present national characters.

The purpose is to instil a love of country, sowing the seeds of patriotism, through deepening the respect and love for those in the community and extending this to those in the state and nation who have helped to make it great.

This is accomplished through graphic presentation of simple and interesting history material. Stories are told, excursions are taken to historic spots, whenever feasible; pictures are utilized, and constructive work made and used in illustration, thereby making the history facts simple and concrete, avoiding formal, didactic presentation. In this grade the history story and the dramatic effort go hand-in-hand. Some of the historical characters and events worthy of dramatization are indicated below, and preparation for the drama and the costumes should be made for regular use, year after year. The following are suggested: Indians and Pioneers; Thanksgiving Day; Betsy Ross and the Flag; The Star Spangled Banner; The Burning of Peggy Stewart. Others may be added.

In this grade no book is placed in the hands of the children but they need to record the simple history facts gleaned from various sources in some permanent form; by means of pictures, post cards, or other illustrations together with the summaries in the form of class stories for purposes of retention and recall, thus *making individual history books.*

The method of procedure briefly summarized is as follows:

1. Excursion to some point of local interest as a basis for talks on local history; pictures, and other illustrative material used when the excursion is impossible.

2. Story telling by the teacher.

3. Reading of stories by the teacher.

4. Stories made by the teacher and children for purposes of reading and record in the history books.

5. Reproduction, oral and written.
6. Dramatization.

Distribution of Subjects and Time Allotment

September; Immediate neighborhood; Review of Indian Life.
October: First Settlers. Our town past and present.
November: Story of the Pilgrims. Thanksgiving.
December: Community needs: fire protection. Christmas in Norway.
January: Community needs—municipal housekeeping.
February: Government housekeeping; postal service. Birthdays—Lincoln, Washngton, Longfellow; Baltimore County.
March: Baltimore County. Baltimore Town.
April: Maryland, our state.
May and June: Maryland, our state. Memorial Day. Flag Day.
Time Allotment: History and Geography alternate; three 20 minute periods in history and two 20 minute periods in geography. History—60 minutes per week. Geography—40 minutes per week.

Local History Stories

I. Early Life in Our Community.

1. Immediate neighborhood.
2. First inhabitants—Indians.
3. First settlers in the neighborhood.
4. First days in our town.
5. Community needs; past and present.
6. Prominent men and women; past and present.

II. Baltimore County and the County Seat, Towson.

1. Name, size, location.
2. Towson.
3. Historic spots.

III. History of the State—Maryland.

1. Our land—past and present.
2. Early pioneer days.
3. Colonial life.
4. Colonial neighbors—Virginia.
5. Baltimore—Our city.
6. Prominent men and women of colonial times to later days.

National History Stories

I. National Holidays.

1. Thanksgiving.
2. Story of the Pilgrims.
3. Christmas.
4. Lincoln.
5. Washington.
6. Story of the flag.
7. Maryland Day.
8. Memorial Day.

Local History Stories

I. Early Life in Our Community.

1. Immediate neighborhood.
   a. Changes constantly taking place; within the remembrance of children, of parents, of grandparents.
   b. Pictures showing change, if possible.
2. First inhabitants—the Indians.
   a. Review facts relative to American Indians learned in previous grades. (See outline.)
   b. Indians of Maryland and vicinity. Local stories, if possible.
3. First settlers in the neighborhood.
   a. From whence.
   b. Reasons for choice of location.
   c. Occupation.
   d. Homes.
   e. Neighbors.
   f. Transportation and communication with others; early stage-coach days, heavy wagons.
4. Our home town.
   a. First buildings. Its beginning as a village: a wayside inn, post-office, blacksmith shop, store, hall.
   b. Name: its origin; change, if any.
   c. First streets; the highway, trail, lanes, side streets.
   d. Map to show simple beginnings. Map to show present day growth.
   e. The old meeting house, the log school house and village school master.
   f. Present inhabitants; number, occupations.
5. Community needs.
   a. Protection: fire, police, health, history of growth of each department.
   b. Municipal housekeeping: street cleaning; water supply; improvement association, park and play grounds; transportation; education.
   c. Government housekeeping: officers and their duties; post-office, postman, how mail is carried, stamps.
6. Stirring incident or event in village history.
7. Prominent men and women of the community and town, past and present—
   a. Stories of public-spirited, philanthropic persons.
   b. Stories of inventors and their work.
   c. Stories of artists and their work.
   d. Stories of skilled artisans and their work.

Reference: Davidson, *Real Stories from Baltimore County History*, Warwick and York.

II. Baltimore County and the County Seat—Towson.

1. Name, size and location.
2. County-seat: Baltimore, the first; then changed to Towson.
3. How Towson got its name.
4. Early days in the settlement.
5. Present day conditions; appearance contrasted with the past; the court-house and its relation to the county.

6. Names of county officers and the work done. (Very simply presented, and as concretely as possible.)

7. Some historic spots in the county:

a. The oldest church, the oldest house, a famous road, a monument, an old fort, etc. (Story told of the one nearest the children's experience.)

REFERENCE: Davidson, *Real Stories from Baltimore County History*, Warwick and York.

III. History of Our State—Maryland.

Introduce by stories which portray interesting changes which have taken place.

1. Our land—past and present.
   The coming of the white man.
   The Ark and the Dove.
   Lord Baltimore.
   Maryland seal and flag.
2. Stories of early pioneer days.
   St. Mary's.
   Margaret Brent.
   Thomas and Michael Cresap. Passano—*Maryland Stories*, Chap. V
   Some neighboring pioneers: Capt. John Smith, Daniel Boone.
3. Colonial life:
   a. Reasons for growth.
   b. Appearance of country.
   c. Industries—tobacco raising.
   d. Master and servant.
   e Manors. Use some manor in vicinity as type.
      Location, appearance outside and inside.
      Furnishings.
      Heating and lighting; contrast with modern homes.
      Comforts, and absence of present day comforts.
   f. Dress of colonial men and women.
   g. Work: in manor house, on the farm, spinning, weaving, sewing, soap-making, candle making.
   h. Pleasures: social life and amusements; house parties, dances, banquets, fox-hunting.
4. Colonial neighbors—Virginia.
   a. Life on a plantation. Use Mt. Vernon as a type and present in connection with the story of Washington.
   b. Servants. Location of servants' quarters, cabins, plantation life, amusement, games, songs.
   c. Compare with colonial life in New England, with colonial life in our state.
5. Development of communication between the colonies.
   a. Horseback.
   b. Stagecoach days, appearance and size of coach; driver or footman.
   c. Stage routes; conditions of roads, length of journeys.
   d. Growth of taverns and inns.
   e. Roads, electric and railroad lines of the present time.
6. Money.
7. Mails.
8. Schools and Sunday customs.

IV. Baltimore—Our City.

1. Baltimore settlement. Among the swamps of the Patapsco.
   a. Reasons for choice of location; convenient harbor for shipping.
   b. First citizen and first resident.
   c. Appearance of the settlement.
2. Baltimore Town—1730.
   a. First streets. Some famous streets of the present day and how they got their names.
   b. First buildings; homes, public buildings, hotels.
   c. Some old street signs.
   d. Comforts and discomforts of those early days; malaria, mosquitoes, freshets.
   e. Social life and customs; pleasures, dress, manners.
3. Baltimore in later days.
   a. Visits to Druid Hill Park, the Federal Buildings, Library, Maryland Institute, Peabody Institute, Union Station, Washington Monument and Mt. Vernon Place, the wharves.
   b. The visits used as a basis for simple stories of persons and incidents closely related to these points.

V. Prominent men and women of Maryland, and stirring events.

1. Charles Carroll of Carrollton.
2. Maryland's Tea Party. The Burning of the Peggy Stewart.
3. Francis Scott Key—The Star Spangled Banner.
4. Lafayette. Story of the flag.

REFERENCES: Bass, *Pioneer Life;* Scharf, *History of Baltimore; Local Patriotic Societies;* Passano, *Maryland History Stories;* Gambrill, *History of Maryland;* Commercial History, issued by Land Companies, as Roland Park Co., Canton Development Co.; Earle, *Home Life in Colonial Days; Child Life in Colonial Days;* Welch, *Colonial Days;* Hallock, *In Those Days.*

NATIONAL HISTORY STORIES

I. Thanksgiving.

Story of the Pilgrims.

1. In England—reasons for leaving.
2. In Holland—Teach Dutch life. Reasons for leaving.
3. Voyage of Mayflower; contrast with ocean voyage of today, the long hard journey.
4. The landing:
   a. Plymouth Rock.
   b. Time of year.
   c. Appearance of country.
   d. Early experience.
5. The New England life.
   a. Home; furniture, fireplace, furnishings.
   b. Occupations; mother and girls; spinning, weaving, making candles, soap. Father and boys; clearing land, building log houses; hunting, farming.
   c. School: teacher, pupils, books.
   d. Church: length of Puritan Sabbath, preparation for Sabbath, call to church by man with drum, length of sermon, tithing man.

6. Hardships of first winter: cold, lack of food, hardships.
7. The first harvest; success of crops.
8. The First Thanksgiving Day.
   a. Preparation.
   b. Indian visitors.
   c. Celebration: prayers, feast, games.
9. Communication among colonists—Indian trails, horseback, row boats, sail boats.
10. Stories:
    Story of Harvest Home in England.
    Story of Squanto and Massasoit.
    Story of the American Thanksgiving.

II. Christmas.

1. Briefly, our own customs.
2. Christmas in Norway.

REFERENCES: Guerber, *Stories of the Thirteen Colonies*, pp. 36–62, 105, 125; Harrison, *In Storyland*, p. 161; Montgomery, *Beginner's History*, pp. 1–18, 44–54; Pumphrey, *Pilgrim Stories;* Pratt, *Stories of Colonial Children;* Stone and Pickett, *Everyday Life in the Colonies;* Blaisdell, *Child Life in Many Lands;* Earle, *Customs and Fashions of Old New England; Child Life in Colonial Days; Home Life in Colonial Days;* Proudfoot, *Child's Christ Tales.*

III. Lincoln—The Young Man.

1. Birthplace.
2. Boyhood.
3. Home and school days.
4. Earning a living; early struggle, the rail-splitter, storekeeper, lawyer.

IV. Washington: The Young Man.

1. Birthplace.
2. Mount Vernon: Plantation life in Virginia. Our neighbors—Virginia.
3. Boyhood: school life, home life, friends.
4. Manhood: surveyor; plantation life.

V. Story of the Flag:

1. The first flag: Betsy Ross.
2. Number and color of stripes.
3. Color of field.
4. Meaning of colors of the American flag and shield.
5. Its use on Memorial Day.

VI. Maryland Day:

1. Settlement: Ark and Dove, the voyage, Lord Baltimore.
2. St. Mary's.
3. Story of an Indian Princess—Margaret Brent.

REFERENCES: Blaisdell and Ball, *First Book in American History;* Earle, *Colonial Days;* Eggleston, *Stories of Great Americans for Little Americans; Stories of American Life and Adventure;* Pratt, *America's Story for America's Children, Colonial Children:* Southworth, *Builders of Our Country;* Welch, *Colonial Days*

Suggestive Treatment of Local History Stories. The data for the Local History Stories related to the Community and the County is secured through the co-operation of teachers of the Third Grade, and the students of the Seventh and Eighth Grades under the direction of their teachers. The material obtained by conferences with the oldest residents in the community, by consulting pamphlets and publications of local persons and land companies, by reading historical books, is, for the most part, formal and didactic in nature. There arises, then, the need for its adaptation to suit the capacities of the children. In adapting the material to meet the specific interest of children, certain salient points are selected as worthy of presentation and organized into an interesting unit in three ways, each dependent upon the other, viz.:

1. The Outline: made by teacher, or by teacher and children, as a basis for informal discussion of some pertinent facts, both social and historical.

2. The History Story: the data organized in story form and written from the standpoint of the adult to be adapted in presentation to the comprehension of the children.

3. The Children's Reading Story; based upon some one interesting incident in relation to the larger whole to be used as reading material.

The following illustrations indicate these three types. 1. The Outline—*Westport.* 2. The History Story—*The History of my Home Town.* 3. The Children's Reading Story—*Grandfather's School.*

WESTPORT

By KATHERINE MUHLBACH

The history of Westport is the history of an industrial town.

I. In Those Days.

1. When Westport was a Farm.
   Three houses in 1869.
   Farming.
   Fun at Spring Garden.
2. When mamma and grandmamma went to school.
   Location of school.
   Inside the school.
   Lessons and games.
   Dress—pictures of grandmothers when they were children.
   Our school and theirs.
3. When mamma and grandmamma went to church.
   Use of school, and homes.
   Our new church.

4. Going to the city before the cars came out.
   The road: conditions and experiences.
   The bridge: length, toll, name.
   Horse cars in the city.
   How we get to town.
5. When there was no post-office.
   Mails sent to friends in city.
   Sent to the glass factory.
   The first post-office.

II. A Factory Town:

1. The first glass factory.
   Location.
   Homes built for the employees.
2. The second glass factory.
   What is manufactured.
   Quantity.
   Where products are shipped.
   Need for more houses.
3. The first home destroyed by fire in Westport.
   Organization of a Volunteer Fire Company.
   How the engine house was erected.
   The power house.
4. What the Lauer and Harper Construction Company did for Westport.
   Products.
   Employees.
   Distribution.
5. How Baltimore helps Westport.

THE HISTORY OF MY HOME TOWN—ARLINGTON

BY OLIVIA OSBORNE

AN OUTLINE OF THE HISTORY OF MY HOME TOWN—ARLINGTON

1. Scattered Estates: Sporting Days.
2. The Reistertown Turnpike: Early Travel.
3. Road Houses.
4. Early Settlers: The Hook Family.
5. The Old Meeting-house: A Methodist Society
6. The Village Post-office.
7. The Village School.
8. Later Day Transportation.
9. Renaming My Home Town.

PART I

At the close of the 18th century northwest Baltimore, beyond the present location of Druid Hill Park, was a series of out-lying farms and wooded estates among the trees of which occasional mansions surrounded by cabins, stables and kennels bespoke the life and pastimes of the country gentry who rode behind the hounds or rivaled each other for the honor of crowning the fair queen of love and beauty at some tournament or fair.

The old Reistertown turnpike, which straggled up Stony Hill and on through Pikesville to Reistertown, was a lonely and uninteresting thoroughfare on which long lines of white-hooded country wagons weekly threaded their way to Baltimore markets from Manchester and other distant places. Each day a lumbering stage-coach jolted over the rough road enroute from Baltimore to Reistertown. Would-be passengers met the coach at the old "Hand House" on Paca Street, or they could book passage where the Commonwealth Bank now stands on Howard Street when the stage would call for and deliver them at any point along the route to Reistertown.

By the roadside, on the brow of Stony Hill, an enterprising Pennsylvanian opened a tavern for man and beast. "The Three Mile House" proved a convenient place for countrymen to put up for the night as it insured an early morning start for the distant farm or when coming in the markets.

Ere long "The Hammet House" opened its doors directly opposite the wayside tavern and here the county squires and huntsmen were lavishly entertained in taproom and dininghall of this aristocratic hostelry. Many rollicking tales are told of this rendezvous for Baltimore County sports who here regaled themselves when returning from the tournament or chase.

About 1785 John Hook of Manchester decided to no longer drive his country van o'er the weary miles from Pennsylvania to Baltimore, so he, with his wife, the young daughter of Daniel Boone, settled in a log house on the Reistertown Road near "the bridge" or the present neighborhood of Wylie Avenue. Life proved very lonely here for these pioneer settlers, but John was saving money so they endured much. Other members of the Hook family and their friends built for themselves cabins or farm-houses in the neighborhood, until in 1800 fifty or more families were scattered between Pikesville, Baltimore, Pimlico Road and Liberty Pike. This little settlement became known as "Hookstown" and the Reistertown turnpike, the "Hookstown Road."

Among others came Father Henry Smith, a retired circuit rider of the Methodist Church, who built for himself a substantial home on Hookstown Road near the five-mile stone, and named it Pilgrim's Rest. His books which have become classics in Methodist circles were written here. He, together with others of the Hook settlement, founded a Methodist Society about 1811. Prayer-meetings were held in a log church near Pilgrims' Rest on Church Lane. In 1822 a stone chapel replaced the log meeting-house. Here a gallery in the rear was reserved for the negro slaves who always worshipped with their masters. The singing as heretofore was without music and one hymn-book served for four or five members. This meeting-house was named McKendree Chapel for a loved bishop of that day. The village grave-yard gradually grew around the chapel and still endures, an old landmark now myrtle and ivy-grown, where many moss-covered tombstones mark the last resting place of Hookstown's early settlers. For many years the chapel's deep-toned bell called the villagers to prayer, but in 1894 the old building was razed to the ground and McKendree church as it stands today was erected beside the parsonage near Pilgrims' Rest.

Each day the stage-coach dropped the village mail at the post-office and store kept by Joseph Feelemyer and here too, chance visitors alighted to meet their waiting friends. The old post-office still stands in its modern dress on the turnpike near Church Lane and is today occupied by members of the Feelemyer family.

For many years the village school was a log house on Church Lane near McKendree Chapel and the master "boarded 'round" and made himself generally useful in neighborhood affairs. Pilgrims' Rest was a rare retreat for such men as the "Master" or traveling preachers. When Dr. Hill with his trunk descended from the stage-

coach into Hookstown it was at Pilgrims' Rest that he found a welcome accorded him until he became established. In 1895 a modern district school was erected on the turnpike above Church Lane.

PART II

LATER DAY TRANSPORTATION

The little settlement of Hookstown jogged on for many years aroused only by the advent of the stage-coach, but one day in 1870 a horse-car plodded up Stony Hill and on to Pikesville, carrying passengers from Cumberland Street and the Hookstown Road on to Pikesville for the small sum of 25 cents. For 15 cents they were dropped at Rogers Avenue in Hookstown, and the stage-coach soon felt the competition for people crowded around the egg-stove in the Pikesville car and talked of the progress of time as they jolted over the miles of lonely country roads. For several years a number of representative citizens of Hookstown and Pikesville, headed by Patrick Walker, had been negotiating with land-owners for the right of way and had at last succeeded in laying a single track from Baltimore to Pikesville.

To many who traveled on the car-line the trip to the city was a long talked-of event, and Maying-parties found their way from the city to Seven-Mile Lane in search of the sweet blossoms that skirted highway and hedges. Picnickers together with those on business bent made the car-line a very popular thoroughfare out of the city. About this time the steam railroad laid its tracks through the village enroute to western Maryland, but made its first stop out of the city at Pikesville.

But other things were destined to awaken the sleepy town: a racing company had established its tracks on the Pimlico Road between Rogers and Hayward Avenues and they negotiated with the railroad to place a platform at Church Lane near Pilgrims' Rest from which point they carried a boardwalk out Hayward Avenue to their tracks. A railroad station was erected on Garrison Avenue in 1872 and many forsook the horse-cars to steam quickly to adjacent towns and distant places. The Pimlico Company now laid a switch to connect with the railroad near Church Lane, but when the electric cars were established about 1892 it was only used to convey freight to the track. For a stated sum neighboring farmers were permitted to sidetrack fertilizers and other chattels for private use.

The electric railway used the old horse-car route to Pikesville along which a modern thoroughfare known as Park Heights Avenue has been developed. A branch railway to West Arlington has been connected with the main road at Belvidere Avenue for the convenience of cross-country residents.

PART III

THE NAMING OF MY HOME TOWN

As the wheels of time jogged on many changes came to the little village of Hookstown on the crest of Stony Hill. For years it had reposed quietly within its boundaries with nothing more enlivening then the advent of the horse-cars to Pikesville and the laying of the Western Maryland Railroad tracks to Westminster. But one day in 1870 a racing company purchased a tract of land on the old Pimlico Road from Roger's Avenue beyond Hayward Lane and established its tracks. They negotiated with the railroad to place a platform known as Pimlico Landing at Church Lane from which point a board-walk was laid out Hayward Avenue to the clubhouse. But, alas, Hookstown now threatened to be submerged into Pimlico, at which the good old Methodist community rebelled. Indignation meetings were called in the log schoolhouse on Church Lane, and one citizen, Mr. Oakford, offered a site on Garrison Avenue, about one-half mile below Pimlico platform to the railroad on which to build a station

to be named for the town. To this the railroad agreed, but the citizens unanimously protested that Hookstown was no longer a suitable name as the Hooks had either died or removed elsewhere; so another meeting was called, each citizen being advised to come prepared to offer a new name for the old settlement.

The evening came, the meeting was called, and the secretary placed the various names upon the blackboard. Belvieu, Belvidere, Ashburton, Auburndale, and others were suggested and voted upon. The interest was tense as the voting was close, and all seemed uncertain what name to select, when an aggressive little Jew, well known and popular in the village, arose to his feet and shouted "I vote that we name him 'Arlington' for the home of the great George Washington!" The absurdity of his gross ignorance of history made a hit and the place was unanimously named Arlington. The name was in due time placed above the door of the little railroad station and Arlington took its place among the railroad towns of Maryland.

Grandfather's School

By Grace Merryman

"Grandfather," said ten-year-old James one afternoon when he came from school, "we had moving-day at school today. The teacher said that we might move our books into any seat which was preferred. I moved into the front seat near the window, where the sun shines in. I think it is the most pleasant seat in the school room."

"Yes," said grandfather, "I think that must be a delightful place to sit and study."

"Did you sit in that seat when you went to school?" asked James.

"My dear boy," replied grandparent, "do you know that I received nearly all of my education in the old log granary which stands out here beside the lane?"

"In the old log granary beside the lane!" exclaimed James, "Was that little building ever a schoolhouse? Please tell me about it, grandfather."

"Well," grandfather began with a contented sigh, "It has been more than seventy-five years since I started to school. The old log granary stood out in the lane at the corner not far from the county road. It was probably built there because there was a spring near by where we went each day to get water. There were no wells in those days. Even all of the houses were built near springs.

"Our seats were nothing but rough, wooden benches with no backs, just such as you might sit upon at a picnic. They were not to be compared with your smooth, comfortable seats, each with a desk in front to write upon."

"Did you not have a desk, grandfather?" asked James.

"The desks, James, were nothing but boards fastened around the sides of the room, and when we had writing to do we sat there."

"Where did you keep your books, pens, and pencils, grandfather?"

"We had but few books, James. We were not given beautiful and suitable books at school as you are. We had to furnish our own books, and many who could not afford to do this, brought any book they had at home. But few pupils had books alike and there were no grades. For pens we used goose quills sharpened to a point, and we often had to take them to the teacher to be resharpened."

"How funny to think of having pens sharpened," said James, and then after thinking a moment he eagerly questioned, "Do you think I could make a goose quill pen, grandfather?"

"Bring me a feather," said grandfather, "and I will make one for you."

James ran to the barn and soon came back with a fine, long feather from a goose's wing. Grandfather quickly sharpened one side of the quill to a point and told James his pen was ready for use. James went to the desk, got a piece of paper and the ink, and after writing for a few moments, he said slowly, "Well, grandfather, it writes, but I think I like my steel pen best. I enjoy hearing you tell about your school, but I think I would rather attend my own school."

"You are right, James," said grandfather, "your school is far better than mine was when I was a boy."

FOURTH GRADE

The work of the third grade has aimed to awaken an interest in local history by making the children familiar with the historical landmarks of the immediate community, county, and state, together with a few of the national heroes. This has developed a taste for historical reading and an interest in history itself. The work of the fourth grade meets the need of this widening interest, and upon this foundation aims to give the pupil through types of discovery and exploration and colonization, some understanding of how the world has come to be known as we find it today.

Each phase of the work is planned to give some expression of the world's history, how the movement for discovery and colonization originated, and that emigration to and settlement in America were only a repetition of what was happening from earliest times, and that emigration and discovery are still going on. The names of the travelers and discoverers and pioneers appear as the history makers of earlier times, but in the history of the United States, and of North America, as a whole, it has lasted from the time of Columbus, almost to the present. McMurry says: "No other country has had such a pioneer history, such a race of men as the early Friends, the Virginians, the Puritans, the French, the Scotch-Irish, pushing westward to subdue and civilize a continent."

The child as he reviews the great achievements on land and sea, should be influenced to overcome difficulties through the contemplation and appreciation of the valiant deeds of real heroes.

Story-telling and dramatization should be continued in this grade. There should be the development of topics, often based upon some very simple problem, which increases the power to organize the points in the oral presentation and to read with discrimination from the text-book. Much illustrative material, particularly pictures and maps for map-reading should be used. Children should be encouraged to make collections of pictures that may stimulate the imagination in picturing times and historic events different from

our own. Such devices as the "time string," or some concrete representation may aid in developing ideas of time and change.

Children of this grade should keep a history note book in which to record the simple problems, or lesson assignment, the outlines made by teacher and children, and the written summaries, both class and independent, made by the children. Whenever feasible some illustrative work should accompany the record.

The teacher's plan or organization of material is the basis for the training in logical thinking. Problems for this grade must be kept simple and to the point. Irrelevent material must be cast out and only that retained which is pertinent to show development. Only by means of a well-organized plan, and sufficent grasp of the necessary data can a teacher put thought-provoking questions to her class. The teacher should make a topical plan and also a daily plan to insure coherence in subject-matter.

Oral presentation requires that four definite steps in procedure be clearly defined as follows:

1. Introduction:

Recall of pertinent material from previous lesson to give setting for new situation.

2. Presentation of a new material:

Story telling by the teacher in a series of units or topics.

Discussion based upon simple problems which children can solve under the teacher's skillful questioning and presentation of facts.

Reading of text and supplementary material by children.

3. Reproduction:

Simple outlines organized by teacher and children; summaries made in part and wholes. Oral and written work.

Dramatization used to summarize certain definite phases of the work; impromptu class plays written by children; and prepared historical plays.

4. Seatwork:

Definite and varied assignment, as:

Recording the problem for solution in next lesson; the outline and summary of lesson.

Reading pages, assigned to find specific points.

Illustrative work in drawing and manual arts.

REFERENCE BOOKS: Discoverers and Explorers: Atherton, *Marco Polo;* *Blaisdell and Ball, *First Book in American History;* Burton, *Builders of Our Nation;* Guerber, *Stories of the Thirteen Colonies;* *Hodgdon, *First Course in American History*, I; *Hall, *Viking Tales;* McMurry, *Pioneers of Land and Sea;* *Montgomery, *Beginner's History;* *Pratt, *America's Story for America's Children;* Southworth, *Builders of Our Country;* Attempts at Colonization: *Hodgdon, *First Course in American History*, I; Colonization: *Blaisdell and Ball, *Children's Book of American History;* Earle, *Home Life in Colonial Days; Customs and Fashions of Old New England;* Gambrill, *Leading Facts in Maryland History;* Hodgdon, *First Course in American History*, I; Jenks, *When American Was New;* *Pratt, *Stories of Colonial Children; America's Story for America's Children*, II; Tappan, *Letters from Colonial Children*. French in America: Baldwin,

*Suitable for children's supplementary reading.

Discovery of the Old Northwest; Catherwood, *Heroes of the Middle West; The Story of Tonty;* *Hodgdon, *First Course in American History;* McMurry, *Pioneers of Mississippi Valley;* *Montgomery, *Beginner's History;* Southworth, *Builders of Our Country.* Holidays: *Blaisdell and Ball, *First Book in American History*, I; *Eggleston, *Stories of Great Americans for Little Americans; Stories of American Life and Adventure;* *Hodgdon, *First Course in American History*, II; Putnam, *Children's Life of Abraham Lincoln;* Scudder, *Washington;* Southworth, *Builders of Our Country;* *Welch, *Colonial Days.*

Distribution of Subjects and Time Allotment

November: Search for a Trade Route: Marco Polo, Prince Henry, Vasco da Gama; Thanksgiving.

December: Finding a new world: Columbus, Vespucci; English in America; Christmas.

January: Spanish in America.

February: French in America; Lincoln and Washington.

March: Colonization: Attempts, French, Spanish and English; Permanent Settlements: Virginia, New York; Maryland Day.

April: Colonization: Massachusetts, Maryland and Pennsylvania.

May: Colonization: Pennsylvania, French and Indian War; Memorial Day.

Time Allotment: Recitation: 25 minutes per day, or 125 minutes per week. Seatwork: 60 minutes per week. Total: 185 minutes per week.

I. Discoverers and Explorers:

1. Age of discovery. Beginnings of trade with the East.
   a. Marco Polo, Italian—opened the way for trade with the East, 1298.
   b. Prince Henry, Portuguese—voyages to find a new route to the East, 1460.
   c. Vasca da Gama, Portuguese—southwestern route to the Indies, 1497.
   d. Columbus. Italian under the auspices of Spain—in search for the ocean route to the Indies finds a new world. 1492.
   e. Vespucci, Spanish—gives the new world a name, 1498.
2. English in America.
   a. Cabot, English—search for a new route to the Indies. 1498.
   b. Drake, English—first Englishman to sail around the world. 1577.

*Suitable for children's supplementary reading.

3. Spanish in America.
   a. Balboa, Spanish—across the continent from coast to coast; Panama, 1513.
   b. Magellan, Spanish—sailed around the world, found the famous route to the Indies, 1519.
   c. Da Vaca, Spanish—across the continent from coast to coast; Florida to Lower California, 1528.
   d. De Soto, Spanish—from coast to Mississippi River, 1542.
4. French in America.
   a. Champlain—French. Search for a route to India, 1608.
   b. Joliet and Marquette. Great Lakes and Mississippi Valley.
   c. La Salle, French. Great Lakes and Mississippi Valley, 1882.

II. Colonization:

1. Attempts:
   a. St. Augustine, Florida, by the Spanish, 1565.
   b. Fort Caroline, Florida, by the French under Laudonierre, 1565.
   c. Roanoke, Virginia, by the English, under Sir Walter Raleigh, 1585.
2. Permanent settlements:
   a. Virginia, 1607.
      Motive for settlement.
      John Smith and his experiences.
      Plantation life.
      First law-making body in America met in Jamestown, 1619.
   b. New York, 1614.
      Henry Hudson and the Dutch.
      Establishment of New Amsterdam.
      Life in New Amsterdam.
      Governor Stuyvesant.
      One of the great estates.
      Conquest of Dutch Colony by the English.
   c. Massachusetts, 1620.
      Motive for settlement.
      Voyage.
      Planting colony.

Life under Governor Bradford.
Development of industries.
Customs.
Indian troubles.
Comparison with life in Virginia.

d. Maryland, 1634.
Motive for settlement.
Lord Baltimore.
Voyage.
Planting colony.
State Pioneers—
Thomas and Michael Cresap.
Trade and difficulties with her neighbors.
Colonial life—Government.
Comparisons made with other settlements.

e. Pennsylvania, 1682.
William Penn and the Quakers.
Motive for settlement.
Treatment of Indians.
Philadelphia.
Franklin.
Comparisons with other settlements.

III. French and Indian War, 1759.

1. Cause.
2. French forts.
3. English determined to drive out French.
4. Washington, as messenger and soldier.
5. The war.
6. Results.

IV. National Holidays:

1. Thanksgiving: Customs: past and present.
   a. Story of the Feast of Tabernacles.
   b. Norse Story of Baldur.
   c. Greek Story of Ceres.
   d. Harvest Home in England.
   e. Origin of American Thanksgiving.
   f. History of the day as a national event.
   g. Customs of today.

2. Christmas:
   Christmas in England or, Colonial Christmas in Maryland and Virginia.
3. Lincoln's Birthday.
4. Washington.
   The Father of His Country.
   Home at Mt. Vernon.
   Public life.
      French and Indian War.
      Commander in Chief in Revolutionary War.
      First President.
   Stories to tell:
      Betty Randolph and her Morning Visitor.
      Cornwallis' Shoe Buckles.
      Washington's Christmas Gift.
5. Maryland Day.
6. Memorial Day.
7. Fourth of July.

DISCOVERERS AND EXPLORERS

TRADE WITH THE EAST

1298 A. D.

I. The Spirit of the Age—Adventure:

1. Vikings in America before Columbus, 1000 A. D.
   a. Adventures under Lief Ericson.
   b. Results.

2. Brief story of Crusades told to show how they helped to make the world better known.

3. Known world at that time.

II. Marco Polo:

1. Early Life.
   a. Home—Venice; location, kind of city, streets, houses. Polo mansion near center of city. Use pictures.
   b. Occupation of father—merchant.
      Eastern and Western trade centers.
      Trade with the East.
   c. Father and uncle in the Far East; Cathay or China.
      Result of visit to Great Khan.

2. Later life.
   a. Marco inspired to visit countries which produced spices, rich silks, etc.
   b. Father's promise to Great Khan kept; return to China, accompanied by Marco Polo.
   c. Best route chosen.
   d. Marco's lengthy visit and service to the Great Khan.

e. Marco's trip to Persia.
f. Marco's return to his own country.
3. Marco's part in war between Genoa and Venice.
4. Marco in prison.
a. Book written.
b. Value of book to world.

Problems:

1. To learn how Europe found a new part of the world and what that new part was.
2. To learn something of Marco Polo's early life.
3. To follow Marco Polo in his travels toward China.
4. To find how the people of Venice reached Asia for spices, drugs, and silks. The land trade routes.
5. To learn about Marco Polo's visit to the Great Khan.
6. To find out how Marco Polo happened to get to Persia.
7. To find what happened when Marco Polo returned to his own country.
8. To find what influence his travels and book had upon the world.

NAVIGATORS AMONG THE PORTUGUESE

I. Marco Polo's Influence:

1. The first Geographer of Asia.
2. New map of world and its effect upon the Portuguese.
3. Land routes to India found.
4. Need of discovery of water route to avoid the plundering Turk.

II. Prince Henry of Portugal, the Prince of Navigators, 1460:

1. Early life.
2. Desire to have Portugal trade with East.
3. Desire to find water route to India.
a. Sailors' fears of the Indian Ocean.
b. Obstacles overcome by Prince Henry.
c. Value to world of endeavors of Prince Henry.

Problems:

1. How Prince Henry's early life and training fitted him for his work.
2. To learn why Prince Henry desired to increase Portugal's trade with the East.
3. To find out how Prince Henry overcame his obstacles.

III. VASCO DA GAMA, PORTUGUESE, 1497 A. D.

1. *Prince Henry's unfinished work.*
2. *Completion of these plans by Vasco da Gama:*
a. His trip down the African coast.
b. His desire realized.
Difficulties in securing a pilot.
Arrival in Calicut.
c. Effect of voyage.
Upon Portugal.
Upon Southern Europe.
Upon Venice.
Upon the world.

Problems:

1. How Vasco da Gama explored the coast of Africa, completing Prince Henry's work.

2. How Vasco da Gama realized his desire and found the ocean route to India.
3. To discover the effects of this voyage upon (a) Portugal; (b) Venice; (c) the world.
4. To learn of the efforts of the Portuguese to find an eastern route to India and the results compared with Spain's effort toward the west.

FINDING A NEW WORLD, 1492

Columbus, under the Flag of Spain

I. Conditions in Europe:

1. Interest in travel and commerce due to:
   Invention of printing; knowledge gained through reading, as, Marco Polo's *Book of Travels.*
   Invention of Mariner's Compass.
2. The work of Prince Henry and Vasco da Gama.
   Route found by sailing *southeast.*
3. Search for a *western* route.

II. Christopher Columbus:

1. Born in Genoa, Italy.
2. Early life.
   His home, family, life, education.
   Marco Polo's *Book of Travels* and map of Asia.
   Desire to become a sailor.
3. Plans to reach India by sailing west, based upon belief that earth is round.
4. Help secured.
   His discouragements and failures.
   Success at the Court of Spain.
5. Voyages and discoveries.
6. Result of voyages.
   Discovery of America, 1492; landed on one of the Bahama Islands.
   Discovered coast of South America.
   Never landed on any part now known as the United States.
7. Died without knowing that he had discovered a new continent.

Problems:

1. To learn something of the boy Columbus.
2. How Columbus came to believe that the world is round, and his desire to find a western route to India.
3. Why Columbus had so many difficulties, and how he overcame them.
4. To learn of Columbus' voyages and discovery, and effect upon the world.
5. To compare results of this voyage and its effect upon the world with Columbus' great purpose.

III. Naming the new world. Amerigo Vespucci:

1. Early life.
   a. Home.
   b. Education by uncle.
   c. Later life.
      In business.
      Interest in exploration.
   d. Voyage with Columbus.
   e. Sent by king of Portugal to explore new land.

f. Account of discoveries written by Waldsemuller.
g. Why America was so named.

Problems:

1. How the New World got its name.
2. To learn some interesting facts about Amerigo Vespucci.

ENGLISH IN AMERICA, 1498.

I. England stirred by news of Columbus' discoveries.

1. Landing of Columbus at West Indies.
2. Search continued by other nations for a short westerly route to India.

II. John Cabot:

1. Life before moving to England.
2. Life in England.
   Offices held in England.
   Letters issued to Cabot by King Henry VII.
   Inspired by Columbus' discoveries "to do some notable thing."
3. First voyage of Cabot.
   Left port of Bristol, taking a more northerly route than Columbus.
   Landed at coast of Labrador, naming it Newfoundland.
   Return to England to tell of new land supposed to be a part of Asia.
   Honor bestowed by king.
4. Second voyage.
   Explored Gulf of St. Lawrence and coast of North America as far as Cape Cod.
   Fisheries established at Newfoundland continued to this day.
5. Results: English gained foothold in the New World.

III. King Henry's loss of interest in the new world:

1. Because wealth of China and India are not found.
2. *One hundred years* pass before England touches the shores again.

Problems:

1. To learn of John Cabot as a little Italian boy in Genoa, the home of Columbus.
2. To find the sort of life Cabot led while in England.
3. How Cabot realized his desire "to do some notable thing;" his voyages and their results to England.
4. How Cabot was treated upon his return to England.

SPANISH IN AMERICA, 1513.

I. Spain's interest in the new world:

1. Discovery of America by Columbus.
2. Spanish settlements on islands of Cuba and Haiti.
3. Spanish greed for gold.

II. Vasco Nunez Balboa:

1. Reasons for wishing to leave Cuba.
   Debts.
   Desire for adventure.
   Search for gold.
2. Voyage to mainland.
   Hidden in cask.
   Captain's forgiveness.
   In command of party.

3. Search for Great Sea.
   Report of Indian.
   Trip through wilderness.
   Discovery of Great Sea, the Pacific Ocean, 1513.
4. Determination to search for rich country.
   Boats carried across mountains.
   Rebuilt on Pacific Coast.
   Balboa's arrest.
   Balboa's death.

Problems:

1. To hear how a poor man, very much in debt, secured a trip to the mainland.
2. To learn something of adventures of Balboa in his search for the "Great Sea."

III. Ferdinand Magellan, Spanish, 1519:

1. Early life.
   Born in rugged mountainous district of Portugal.
   Time spent at father's court.
   Education.
2. Later life.
   Part in war with Moors.
   Desire to reach Spice Islands by western route.
   Plan rejected by Portugal.
   Plan accepted by Spain.
3. Voyage.
   a. Experiences in Atlantic Ocean.
   b. Experiences in Pacific Ocean.
   c. Experiences in Indian Ocean.
   d. Results of voyage.
      (1) Found strait connecting Atlantic and Pacific Oceans.
      (2) Crossed Pacific.
      (3) Discovered Philippines.
      (4) Found western route to India.
      (5) Proved world to be round.

Problems:

1. To learn something of the early life of a Portuguese who was sent to Spain to try to discover western route to India.
2. How his experiences in his later life prepared him for his voyage across the Atlantic.
3. How he secured help for his voyage.
4. To know something of his experiences during voyage in Atlantic, Pacific, and Indian Oceans.
5. To learn the results of voyage.

IV. CABEZA DA VACA—SPANISH, 1528.

1. The Spaniard's Search for Gold:

a. Cortez and Pizarro in Mexico.
b. Narvaez in Florida.

2. Cabeza da Vaca:

2. *Cabeza da Vaca:*
   a. Reasons for da Vaca's trip:
      Narvaez's defeat.
      Narvaez's desire to make a better record.
      Da Vaca's trip with Narvaez.
      Origin of da Vaca's name.
   b. Search for Panuco.
   c. Trip to Apalachen.
   d. Experiences at Apalachen.
   e. Trip to Aute.
   f. Aute and Apalachen compared.
   g. Explorations along the coast.
      Preparation.
      Voyage—Death of Narvaez.
      da Vaca the leader.
   h. Cabeza da Vaca's experiences with the Indians on Matagorda Island.
      Search for Panuco.
      Experiences in forest.
   i. Cabeza da Vaca famous.
      Medical work among the Indians.
   j. Results of da Vaca's trip.
      First American traveler—route taken across continent.
      Blazed trail from Atlantic to Pacific.
      Services as Medicine Man.

Problems:

1. How Cabeza da Vaca happened to come to America.
2. How Cabeza da Vaca received his name.
3. To learn of Cabeza da Vaca's experiences while with Narvaez.
4. To find out why the Spaniards were disappointed in Apalachen.
5. To compare Aute with Apalachen.
6. To learn of adventures of Spaniards while sailing along the coast.
7. To learn something of Cabeza da Vaca's experiences with the Indians on Matagorda Island.
8. To find out what made Cabeza da Vaca famous.
   a. With the Indians.
   b. In history.

V. FERDINAND DE SOTO—SPANISH, 1542.

1. *Favors granted by Spain.*
   a. Trip to Peru as Pizarro's officer.
   b. Rewards for bravery.
2. *Expedition across Southern United States.*
   a. Object:
      To find gold.
      To conquer territory north of Mexico.
   b. Equipment.
   c. Landing at Tampa Bay.
   d. March westward.
      States crossed.
      Experiences: Indians, swamps, wilderness.

e. The Mississippi River.
Discovered by Peneda in 1519.
Explored by De Soto in 1542.

3. *De Soto's death.*

a. Burial.
b. Fate of his followers.

Problems:

1. To learn of another Spaniard who tried to conquer the country north of Mexico and to find gold.

2. To learn of the difficulties attending De Soto's wanderings in the Southern states.

3. To find out what happened to De Soto and the results of his trip.

English in America, 1593.

I. Sir Francis Drake

1. Happenings in Spain and England since Cabot's time, or 100 years:

a. War between England and Spain.
Religious differences.
Increased interest in trade on high seas.
Piracy.

b. Hawkins and the slave trade.

2. *Sir Francis Drake:*

a. Early life.
Poor—educated by rich uncle.

b. Early voyages.
Apprentice on uncle's ships.

c. Later voyages.
In charge of uncle's ship.
Voyages across Atlantic — plundering Spanish ships.
Treasure carried home to queen.
Made captain of fleet by queen.

d. Voyage for queen.
Lands on Isthmus of Panama.
Plunders Spanish towns.
Obtains first view of Pacific Ocean.

e. Desire to sail into Pacific.
Queen gives help.

f. Voyage around the world.
Route of voyage.
Troubles on voyage.
Results: First Englishman around world; New land claimed for England; Treasures taken from Spanish.

Problem:

1. To compare Drake's voyage with Magellan's voyage, made almost a hundred years earlier.

Attempts at Colonization

1. French at Fort Caroline, Florida, 1564.
2. Spanish at St. Augustine, Florida, 1565.

I. French in Florida:

1. Reasons for coming.
   a. Sent by Coligny to escape persecutions of Catholics.
   b. Came under Laudonierre.
   c. Landed on St. John's River, Florida.
2. Settlement at Fort Caroline.
   a. Little town built—Fort Caroline.
   b. Occupation of people—hunting, fishing, and farming.
   c. Joined by Ribaut's colony.

II. Spanish in Florida:

1. Claim to land through exploration.
   Ponce de Leon.
   Cabeza da Vaca.
2. Reasons for coming:
   Sent by king to protect interests of Spain.
   Came under Menendez.
3. Settlement at St. Augustine not far from Fort Caroline.

III. The Hostile Camps:

1. The king's determination to destroy the French colony.
   Soldiers sent to make attack.
   Men, women, and children mercilessly massacred.
2. The fate of St. Augustine.

IV. In 1600, Spain held possession of the new world:

1. Greed for gold.
2. The dream of Columbus to convert savages to Christian faith forgotten.

English at Roanoke, Virginia
1585

I. Sir Walter Raleigh:

1. Early life.
   Born in Devonshire, England.
   Childhood.
   Education.
2. Life at Oxford.
   Desired life of action.
   Steeped in books of adventure; Columbus, Magellan, Cortez.
3. Adventures:
   Aided Protestants in France.
   Engaged in England's conflicts with Holland and Ireland.
   Experiences with Sir Humphrey Gilbert on trip to America.
   At brilliant court of Queen Elizabeth.

II. Planting a Colony:

1. Expeditions: 1584, 1585.
   Explored land on Roanoke Island.
   Named land Virginia in honor of Virgin Queen.
   Knighthood bestowed.

2. Life in Colony.
   Indians very kind.
   Saw tobacco, corn, and potatoes for first time; later introduced into England.
   Supplies from England did not arrive.
   Colonists left for England upon arrival of Sir Francis Drake.
   Arrival of supplies—colonists gone.
3. Arrival of new colony, 1587.
   Wished to build city of Raleigh.
   Boat returned to England for supplies.
   Could not return.
   First English child born in America, Virginia Dare.
4. Colony abandoned.
   Fate unknown.
   Raleigh gave up attempts.

III. Sir Walter Raleigh's later years:

1. Raleigh. a prisoner.
2. Liberated from prison.
   Searched for gold.
   Reached Orinoco River.
   Guiana claimed for English.
3. Beheaded.
   Death of Elizabeth.
   Ascension of James I to throne.
   Dislike for Raleigh.
4. Results of Raleigh's ventures.
   Colonization failed.
   Wrote history of world.
   Introduced tobacco and potatoes into England.

Problems:

1. To learn something of early life of man who wished to plant a colony in America.
2. To find where Raleigh's adventures led him.
3. To learn of Sir Walter Raleigh's experiences during trip to America with Sir Humphrey Gilbert.
4. Why Sir Walter Raleigh was a favorite of Queen Elizabeth.
5. To learn of his first expedition to America in command of a vessel.
6. To learn of the second expedition sent out by Raleigh.
7. To learn the fate of the colony at Roanoke, in which was born the first English child in America.
8. How jealousy affected the later life of Raleigh.
9. To learn results of Raleigh's strong desire to plant a colony in the new world.

COLONIZATION

VIRGINIA—CAPTAIN JOHN SMITH

I. Settlement:

1. By English.
2. Reasons for coming.
   Search for gold.
   Not willing to allow Spain to have all this new country.

3. Jamestown, 1607, under the direction of the London Company with Captain John Smith an active member.

II. Captain John Smith:

1. Early life.
   Clerk.
   Soldier: In Netherlands; In France.
   Visited Egypt; Hungary. Adventures in Hungary.
2. Return to England.
   Dull life.
   Resolve to come to America.
3. Voyage to America.
4. Landing at Jamestown.
   Condition of colony.
5. Smith as a leader.
   How his policy saved the colony.
6. Smith's dealings with the Indians.
7. Exploration of country.
   His pocket compass saved his life.
   Made paper talk.
8. Smith's return to Jamestown.
9. Smith as governor.
10. Smith's accident—return to England
11. Smith's return to America.
    Exploring New England coast.
    Interesting account.
    Good maps.

III. Jamestown without Smith:

1. The colony under a new governor.
2. Prosperous condition of the colonists.
   Four thousand in 1617.
   Land given; crops raised on plantations.
   Effect of tobacco raising.
   Arrival of the women—the effect.
   Arrival of slaves—effect.
3. Rolfe famous in early history.
4. The first law-making body in America, 1619.

IV. Jamestown:

1. Long ago.
2. Now.

Problems:

1. To learn the early life of a very adventurous Englishman who came to America.
2. Adventures of Captain John Smith in America, and how these helped him to become a good leader.
3. Smith as a leader and how he overcame his greatest difficulties—Dealing with the Indians.
4. Why Smith was better able to help his people after his stay with the Indians.
5. How Smith's good leadership was shown in the ability of the colonists to do without him.
6. Virginia was prosperous. Why?
7. To find out how the Virginia colony began self-government.

NEW YORK—CAPTAIN HENRY HUDSON AND THE DUTCH

I. Captain Henry Hudson:

1. A noted English sea-captain.
   Friend of Captain John Smith.
2. Voyage for England.
   Sent by London merchants.
   Object of voyage; results.
3. Voyage for Holland.
   Sent by Dutch East India Company.
   Object of voyage.
4. Hudson in America.
   Reasons for coming.
   Discoveries: the Hudson River, 1609.
   Experiences with the Indians.
5. Return to Europe.
   Prisoner in England.
   Report to Holland.
   Dutch claimed territory in America.
   Fur traders.
6. Hudson's second voyage for England.
   Released from prison to make voyage.
   Hudson Bay discovered.
   Hudson's fate.
7. Effect of Hudson's voyages.

II. Establishment of New Amsterdam, 1614:

1. Early life in New Amsterdam.
   Patroons and large estates.
   Relation with the Indians and their neighbors.
2. Governor Stuyvesant—characteristics.
3. Conquest by the English.

III. The Fur Trade:

1. Develop the fact that the white people bought furs in such quantities that it constituted a very important business.

2. This trade began long before any settlers came to this country.

3. Extent. Show that this business extended through all the French and English colonies.

4. Westward movement. The white traders went far after the furs, instead of waiting for them to be brought to them. Locate important trading posts, Montreal, Oswego, Detroit, and points along Mississippi River.

5. The Indian's method of obtaining furs, trapping, hunting.

6. How the white trader, called an Indian trader, paid for furs. How he carried the goods to exchange for furs, to the trading post in the Indian country. How furs were carried east to be shipped to Europe. Life at the trading post in winter.

7. Study briefly the Hudson Bay Fur traders. John Jacob Astor and the fur trade.

8. The New York Fur trade.

9. Trading posts and trading routes. Trace on map.

Problems:

1. What Hudson found instead of a shorter route to India.
2. To learn something of Hudson's experiences in Hudson River.
3. How the fur trade developed.
4. How the people lived in New Amsterdam.
5. To find out why New Amsterdam changed its name to New York.

MASSACHUSETTS

CAPTAIN MILES STANDISH

I. Settled by English, 1620:

1. Unrest in England due to religious persecution.

II. Seeking a Home, 1608:

1. Leaving England for Holland:
   Arrest by English officers.
   Second attempt to leave, families separated.
2. Leaving Holland for England:
   Length of stay twelve years; colony 1000.
   Old people left behind; younger and stronger members selected to go.
   Voyage to England on Speedwell.
3. Leaving England for America:
   Joined by friends on Mayflower.
   Speedwell abandoned.
   Voyage; arrival at Provincetown, or Plymouth.
4. Miles Standish: a brave soldier, chosen leader; not a Pilgrim.
   Written agreement drawn up on shipboard.
   John Carver elected Governor.

III. The Colony:

1. Life on Mayflower in harbor for month.
2. Spot for landing selected by Standish.
3. The first winter:
   a. One log house built.
   b. Protection against Indian attacks provided.
   c. Suffering of colonists; sickness and death.
   d. Aid of Captain Standish.
   e. Departure of Mayflower.
4. The friendly Indians:
   a. Visit of Samoset in spring; aid given by Squanto.
   b. Treaty of peace drawn up by colonists and Massasoit.
5. Unfriendly Indians:
   a. Warning—snake skin filled with arrows sent by Canonicus; reply—snake skin filled with bullets sent by Standish; result.
   b. Warning given by Massasoit of Pecksuot's plot.
   c. "The Little Captain" Standish's way of settling with Pecksuot.
6. Growth of colony:
   a. Homes: one for each family built in spring; kind—walls, chimney, fireplace, windows; interior—furniture.
   b. School: Kind—roof of dried grass; interior—walls and benches; teacher.
   c. Church: kind; protection from Indian; discipline of children; length of service.

d. Arrival of Pilgrims from Holland.
e. Standish's return to England to borrow money for colonists.

7. The first Thanksgiving:
Purpose.
The great feast.
Indians as guests.

8. Relations with Indians:
a. Illness of Massasoit cured by Winslow.
b. Gratitude of Massasoit shown by warning of attack; trouble settled by Standish.
c. Massasoit's two sons named by colonists.
d. Massasoit's death.

IV. Trouble with Indians: King Philip's War:

1. King Philip, son of Massasoit, the leader.
2. Causes:
a. Alexander's death.
b. Growing strength of colonists.
c. Growing discontent among the Indians of King Philip's tribe.
d. Philip's growing hatred.
3. Attempts to avert trouble.
a. Conversion of Indians to Christian faith.
b. Treaty made with Philip, but soon broken.
4. War declared in 1675.
5. Manner of fighting:
a. In ambush; attack at night; attack upon women and children.
b. Indian camp built in winter, attacked by English.
c. Relentlessness of King Philip.
d. Flight through swamps.
6. Close of wars.
a. King Philip's wife and children captured.
b. Philip's death.

MARYLAND

THE CALVERTS, LORD BALTIMORE

1. George Calvert, Lord Baltimore:

1. Reasons for coming to America: conditions in England:—
a. Catholics persecuted.
b. George Calvert's desire to help them.
c. Appeal to the king for a grant.
2. Experiences in Newfoundland.
a. Grant given by king.
b. Reasons for leaving Newfoundland.
3. Experiences in Virginia.
a. Treatment by Virginians: Church of England.
b. Result.
4. Return to England.
a. Grant given by king.
b. George Calvert's death.
5. Cecilius Calvert, the son, to carry out the father's plan of making a settlement in the new world.
a. Appointed Leonard Calvert, his brother, the governor of the new province.

II. Planting the colony:

1. The voyage.
   a. Difficulties: Dove disabled.
   b. Landing at St. Clement's Island.
   c. Reasons for leaving St. Clement's Island.
2. Land secured for settlement.
   a. Treatment of Indians by Lord Baltimore and colonists.
   b. Treatment of colonists by Indians.
   c. Settlement named St. Mary's.
3. Kind of settlement.
   a. Houses.
   b. Kitchen middens.
   c. Cultivation of land.
4. Purpose of settlement.
   a. Refuge for persecuted Catholics.
   b. All Christians invited.
5. Troubles of Lord Baltimore and colonists.
   a. With Indians; protecting friendly Indians from hostile tribes.
   b. With Claiborne; Kent Island.
   c. With Pennsylvania; Mason and Dixon Line.

III. Towns of Maryland:

1. Annapolis.
   a. Settled by Puritans from Virginia.
   b. Cause of settlement.
   c. Named.
   d. Buildings; occupation of people.
   e. Colonial life, compared with Virginia.
   f. Burning of Peggy Stewart, Revolutionary War.
2. Baltimore.
   a. Settled by Maryland planters.
   b. Reasons for choice.
   c. Named.
   d. Growth of town.
   e. Important events of war of 1812—
      Battle North Point.
      Bombardment Fort McHenry. National Song, Star Spangled Banner, written.

IV. Ability of the Calverts as leaders:

1. Characteristics of good leaders: at school; in community; in state or country.
2. Leadership shown by the Calverts in the settlement of Maryland.
3. Honor shown the Calverts.

V. Maryland Seal.

1. Sent over from England.
2. Stolen by Ingle.
3. Second sent: Arms of Calvert and Crossland families; Inscription.
4. Ten seals.
5. Present one adopted 1876.

VI. Maryland Flag:

1. First carried in Battle Severn.
2. Contained all colors and characteristic designs of the "Great Seal."
3. Adopted in 1904 as state flag by General Assembly.

Problems:

1. To learn how Lord Baltimore helped the Catholics who were persecuted in England.
2. To find out how Cecilius Calvert helped the Catholics after his father's death.
3. To learn of the colonists' adventures during their search for a new site for a settlement.
4. How St. Mary's village was bought from the Indians and the relations of Indians and white men.
5. To learn why Lord Baltimore had trouble with Claiborne.
6. To learn of Maryland's troubles with her neighbors on the north.
7. Maryland's Tea-party compared with the Boston Tea-party.
8. Baltimore in war—Battle of North Point, Bombardment of Fort McHenry.
9. How the Star Spangled Banner came to be written.
10. To find out in what ways the Calverts showed their ability as leaders. To decide if they were good leaders.

PENNSYLVANIA

WILLIAM PENN, 1682.

I. Settlement: By English Quakers.

1. Reasons for leaving England.
2. The Society of Friends.
   Plain dress and manner.
   Conscientious.
   Leader, George Fox.
3. The treatment of Quakers in the New World colonies.
4. Desire of William Penn to help them.

II. William Penn:

1. His boyhood.
2. His Oxford days.
   Became a Friend.
   Expelled from college.
3. Exiled from home.
4. In charge of father's estate.
5. Promised friendship of King Charles V and Duke of York.
6. Keen interest in New World as a place of refuge for persecuted Quakers.

III. The Colony:

1. Grant of land received by Penn from the king in payment for a debt.
2. Location and name of tract.
3. Friendly relations established with:
   The neighbors; Swedes. Purchase of New Jersey by Penn.
   The Indians; "The Treaty Elm."
   The colonists themselves.

4. Founding of the city of "Brotherly Love."
   Site for Philadelphia chosen.
   Plan of town made by Penn before leaving England.
   Freedom of faith granted to all.
   Rapid growth due to Penn's wise rule.
5. Penn's residence in Philadelphia; hospitality extended to all.
6. Noted buildings and landmarks in Philadelphia today.
   Independence Hall.
   Betsy Ross House.
   Church Washington attended.
   Mint.
   Monument to replace the "Treaty Elm."

IV. Benjamin Franklin:

1. An American, born in Boston, 1706.
2. His boyhood days.
   a. In the grammar school at eight.
   b. Making soap and candles at ten.
   c. Became a printer, started a newspaper, wrote articles at fourteen.
   d. Ran away from Boston at seventeen.
3. In Philadelphia.
   a. Appearance upon arrival.
   b. In a printing office.
   c. To London for press and type.
   d. Upon return published a newspaper.
   e. Issued "Poor Richard's Almanac."
   f. Invention of Franklin Stove.
4. Public service work for the city of Philadelphia.
   a. Founder of the first library in Philadelphia.
   b. Laid foundation for High School, which is now the great University of Pennsylvania.
   c. Fire company started.
   d. Hospital founded.
5. Franklin in public life; a wise counselor.
   a. Representative to Albany convention; proposed a plan to unite colonies under one government when there was likely to be war with the French.
   b. Trip to England in behalf of the people.
   c. Trip to France to help in the great Revolutionary War.
6. Famous at home and abroad.
   a. As a writer.
   b. Scientific discovery: lightning is electricity.
   c. As a diplomat and statesman.

FRENCH IN AMERICA, 1524.

I. Voyages of English and Spanish explorers:

1. Object of voyages: gold; route to India; refuge.
2. Discoveries made.

II. Desire of French to obtain land:

1. Searching for new fishing grounds: Newfoundland, St. Lawrence River.
2. Verrazano, 1524. Route taken, discoveries made.

3. Cartier, 1534, two voyages to find the northwest passages to India. Route taken, discoveries made.
4. Colonization attempted at Fort Caroline.

III. Samuel de Champlain in the St. Lawrence valley. 1603.

1. First voyage.
   a. Reasons for coming: search for route to India.
   b. The route taken.
2. Second voyage.
   a. Reasons for coming.
   b. Site for settlement selected, Quebec, 1608.
3. Relations with the Indians.
   a. Alliance with Hurons and Algonquins.
   b. Battle with the Iroquois.
4. Results of voyage.
   a. Discoveries: Lakes Champlain and Huron.
   b. Fur trade established between French and Indians.
      Fur fairs to attract the Indians.
      Wood rangers or Courier de Bois.
      Established trading posts which afterwards became permanent colonies.
   c. First permanent French settlement in America at Port Royal, Nova Scotia, in 1607.
5. Death of Champlain.

Problems:

1. How Champlain won the hatred of the Iroquois Indians.
2. Why the trading posts followed the Great Lakes.

V. Joliet and Marquette in the Mississippi Valley, 1673:

1. Reasons for their coming.
   To find the "Father of Waters" and follow it to the sea.
2. Forts and missions established.
3. Desire to follow the course of "Mesipi" River.
4. Adventures with Indians.
5. Joliet's report to governor.
6. Marquette's death.
7. Results.
   Claim of territory near Mississippi.
   Conversion of the Indians.

VI. La Salle in the Mississippi Valley, 1677:

1. Reasons for expedition.
   To find the mouth of the "Father of Waters."
   To take the land for France.
2. His plans:
   To sail through Great Lakes.
   To explore and build forts in the land explored.
3. His journey.
   a. Trip up Niagara River in the *Griffin*.
   b. Trip through Lakes Erie, St. Clair, Huron into Lake Michigan. Fur trading routes.
   c. *Griffin* sent to France with load of furs.
   d. Finding and exploring the Mississippi River.

e. Waiting for the return of the *Griffin.*
f. Adventures with Indians.
g. Another ship built. Trip 1000 miles for rigging and anchor; the return journey.
h. Pushed down Mississippi River to mouth.
4. Took possession of land in the name of Louis XIV, Louisiana.
5. La Salle's attempted settlement.
a. Desired to plant a colony at mouth of the "Father of Waters."
b. Attempted to reach river by way of Gulf of Mexico.
c. River passed.
d. Unsuccessful attempt to found a colony on the coast of Texas.
e. Search for Mississippi River continued.
f. Journey to Montreal for help. Difficulties. Death.
6. Work of La Salle.
a. Explored Mississippi River to its mouth.
b. Established chain of forts along the Mississippi River from the Great Lakes to the Gulf of Mexico.
c. Took possession of the land in the Mississippi Valley for France, 1682.

Problems:

1. In what ways La Salle showed an undaunted spirit.
2. Discuss his experiences in each region.—Canada: at Niagara; on the Great Lakes; on the lower Mississippi, and determine the time of greatest hardship and trial.

French or English in America, Which?

I. Conditions in the new world:
1. Spanish possessions.
2. English possessions.
3. French possessions.

II. French and Indian War:
1. Causes:
a. Position of English and French claims in America.
b. Overlapping of claims.
French claimed entire Mississippi Valley.
English claimed part of Mississippi Valley.
c. War in Europe between England and France.
d. Influence of French upon Indians.
2. Signs of trouble—
a. English determined to drive out French.
Organization and purpose of Ohio Company.
b. French determined to hold their territory. Fort DuQuesne built.
3. Washington's trip to French fort.
a. Difficulties of journey. Why chosen.
b. Message sent and reply given.
4. The conflict.
a. Fort Necessity built. Captured by French.
b. Attack upon Fort Duquesne. General Braddock's defeat.
c. Louis Montcalm sent from France. French victory.
d. Attack upon Louisburg. English victory.

e. Siege and capture of Quebec.
Aid of William Pitt. Wolfe sent to command.
Montcalm's death.
Wolfe's death.

5. Results of war:

a. French gave up claim of territory in America; Mississippi Valley, and Canada.

Problems:

1. To learn cause of these wars.
2. How the English determined to gain possession of the Mississippi Valley. Why they claimed it.
3. How the French proposed to hold the territory.
4. Why Washington was chosen to take message to French fort.
5. To learn the cause of Braddock's defeat.
6. To follow Montcalm in his noble work for the French.
7. To see what caused the defeat of the French.
8. To learn results of war.

A PLAN FOR TEACHING MARCO POLO

By E. Frances Kane

Outline

I. Vikings—their discoveries.
II. Crusaders.
III. Growth of Mongol Empire.
IV. Marco Polo.
1. Early life.
a. Boyhood days in Venice.
b. Venice; advantages of location.
c. Occupation of father—merchant.
Eastern and Western trade centers.
Trade with the East.
2. Later life.
a. Visit to home of Great Khan.
b. Return to Venice.
3. His book of travels, and its influence upon the world.

Problems:

1. To learn how Europe found a new part of the world and what that new part was.
2. To learn something of Marco Polo's early life.
3. How Marco Polo happened to go to Asia.
4. What the Great Khan's friendship did for him.
5. To find how the people of Venice reached Asia for spices, silks, perfumes, and drugs.
6. To learn the influence Marco Polo's travels had on the world.

Teacher's Aim:

How the Old World found out more about the East, and the influence this knowledge had on the world.

Subject-Matter.	Method.
I. Introduction	Who discovered America? When?
Facts known by a Fourth Grade child.	What century do we say that year is in? (Explain century.)

Discovery of America by Columbus.

Vikings—their discoveries and the influence of their discoveries on Europe in the 8th and 9th centuries.

Who came to America long before Columbus?

Tell something about the Vikings. Where did they live? What part of Europe, etc.? In what century or centuries were those discoveries made?

What influence did these discoveries have on Europe?

Vikings in the 8th and 9th centuries. Columbus in 15th century.

How long were these discoveries made before Columbus made his?

Think of the length of time that elapsed between the eight century and the fifteenth.

Crusaders in the 12th and 13th centuries. Their meaning.

What influence they had.

N. B.—Told in simple fashion.

Do you think anything else of importance happened between these two periods?

Do you think the Crusaders had any influence in making the world better known? Why not?

Growth of the Mongol Empire in the 13th and 14th centuries.

What, then, do you think effected a better knowledge of the world at that time? How many would like to know?

II. Pupil's Aim:

How the growth of the Mongol Empire made the world better known? Or what happened that made Europe find a new part of the world and what that new part was?

Europe, Northern and Eastern Africa and part of Asia.

First, we must know just what part of the world was known at that time.

Here tell where the Mongol Empire was.

How many would like to know just where the Mongol Empire is and something about the people that lived there?

Tell about the people and their leader, etc.

Here tell about the conquests made by different Mongol rulers. How Chinchiz Khan conquered Central and Eastern Asia, including China. How his son conquered part of Western Asia, and how another general conquered Southern Russia.

In our aim we spoke of the growth of the Mongol Empire making the world better known; how many would like to know just how this Empire grew?

Use maps.

How the Mongol victories affected Europe.

When these Mongol rulers were attacking Southern Russia, how do you think the people of Europe felt?

The people of Europe were Christians. Mongol people were not.

Compare the Mongol people with the people of Europe.

Who do you think would be most concerned in Europe about the Mongol victories? Who was at the head of affairs in Europe?

Pope.

Sent ambassadors or messengers.

What do you think he immediately did?

Friars.

Who do you think those messengers were?

What do you think those friars found out?

Here tell—They first heard of a new Kingdom the Mongols had not yet conquered. This kingdom was called Cathay, in Eastern Asia.

Read your aim and then see if you can tell me.

After they heard about this kindgom, what do you think they wanted to do? Why? Do you think they succeeded in finding Cathay?

When they found it, what do you think they saw in this country?

Do you think the knowledge gained about this new country had any influence on Europe?

Summary.

How did it make the world better known? What brought about this knowledge?

III. Marco Polo.

How many would like to know of some one who really did a great deal in making the world better known?

Here tell who.

Now, what would you like to know about Marco Polo?

Pupil's Aim:

How Marco Polo made the world better known?

Where he lived.

First, what would you like to know about this man?

Here have them tell what they know

Do any of you know anything about Venice? (Pictures may be used here and maps.)

Where is Venice? Locate it on the map. What does that tell you about it? What water is it on?

Streets of water. Here explain why.

What do these pictures tell you about Venice?

What does that tell you the Venetians had to do to get around?

Knowing the location of Venice and how the people had to get around, what do you think they became?

Do you think Marco Polo was interested in the sea as a boy? Do you think he was interested for any other reason?

Do you think the people of Venice were making journeys to other parts?

For trading purposes.

Why should such journeys be made?

Where do you think they traded?

Think of the places known at that time.

What did Europe know about Asia?

Southern and Eastern Asia, Spice Islands.

Here tell what parts of Asia were known by Europe. Mention Spice Islands.

Spices, drugs, gums, perfumes, silk.

What do you think Europe got from Southern and Eastern Asia? What would you suppose they got from Spice Islands?

Crude method of cooking. So much fish.

Why did the people of Europe need so much spices?

Knowing what and with whom these Europeans traded, what next would you want to know?

IV. Pupil's Aim:

How the people of Venice got to Asia for spices, drugs, etc., and also how Marco Polo happened to make the world better known?

Map Study. Both geography and wall maps.

Consult map. Find Venice. Find Eastern Asia. Find Southern Asia and the Spice Islands.

How do you think the traders from Venice reached those different parts of Asia?

Sea or Southern route.

On what bodies of water?

From Venice to Alexandria, to coast of Red Seas by means of caravans, to Indian Ocean.

Land and water or Northern route.

Consult your map again and see if you can find another route they may have taken.

From Venice to Black Sea, across the mountains to Caspian Sea, and thence to Central and Eastern Asia.

By way of Asia Minor to Persian Gulf, to Indian Ocean.

What other way could they have gone?

Northern, on account of mountains, deserts and ungoverned people.

Which of these routes do you think was the most dangerous? Why?

Storms, pirates.

Do you think there were any dangers attached to the other routes?

Trading center.

Knowing the location of Venice, what do you think it became?

Who do you think became one of the traders?

Why do you think Marco became a trader?

His father and uncle were traders.

Do you think there might have been another reason why Marco became a trader?

Here tell about Nicolo and Maffeo Polo.

Genoa.

What other European city became a trade center? Why?

Alexandria and Constantinople.

Where do you think the European traders met the traders from Asia?

Fundaco, or trading quarter.

Here tell about the quarters the different traders had at the different trading centers.

Left Constantinople, where they had trading quarters, and went to Crimea to trade.

How many would like to hear of a trading journey of Nicolo and Maffeo Polo?

Here tell.

Why go? What for?

Locate Crimea on the map. What did they expect to get?

Ambassadors from China.	Whom do you think they may probably have met?
Go to Eastern Asia or China.	What do you think these ambassadors persuaded them to do? How?
Great Khan.	Whom do you think they met when they arrived in China? How do you think he treated them? When I tell you they spent one year there, how do you think they must have been treated?
Liked Western arts and Christian civilization.	Why do you think he treated them so well?
Sent a message to the Pope to send Christian missionaries to teach Western arts and civilization to his people.	What do you think he requested them to do when they were about to return home? What are missionaries?
The Pope (Clement IV) had died.	What do you think had happened when they arrived in Italy?
Had to wait two years for the election of a new Pope.	What difficulty do you think they had? Do you think the new Pope consented to send the missionaries?
Sent two friars.	How many do you think? Who were they?
Nicolo and Maffeo Polo.	Who do you think went with the friars? Why? Do you think the Polos took any one else? (*Here tell* that Marco, a lad of 17 years, also accompanied them.)
Two friars lost heart and returned home.	What do you think happened when they were on their way? Did the Polos lose heart? Why not? When they arrived in China, do you think the Great Khan was disappointed? Why?
Took a great fancy for Marco.	How did he receive them this time? Why?
Took Marco into his service and he became his chief commissioner. Was to go to Cochin, China, India, Tibet.	Since he was so pleased with Marco, what did he do for him? What was his duty? Did he perform this duty well? Was all this an advantage to Marco? Why? When I say he stayed there 17 years, do you think he learned much about that part of the world? *Here tell.* When would all this knowledge be an advantage to Europe?
Great Khan didn't want him to return to Europe.	Why didn't he return sooner? Was this a good reason, do you suppose? Do you think he was anxious to return? Why?

The Khan of Persia wanted to marry a princess in the Great Khan's family, and Marco was chosen to conduct her by sea to Persia, etc.

How many would like to know just how he happened to get back to his native land?

Here tell.

Why do you think Marco was chosen? Why were they to go by sea?

Two years.

How long did it take them to make the journey?

Being so near his own country, what do you think he did?

After being away so long, how do you think he was received?

Why do you think he wasn't recognized?

How did he try to prove that he was Marco?

Did they believe him? Why not?

War between Genoa and Venice.

What do you suppose happened soon after his return?

Do you think Marco took part in the war?

Imprisoned

What do you suppose happened to him?

Do you think he thought of his travels while in prison? What had he been anxious to do? Do you think he got a chance while in prison to tell anyone?

Here tell how a fellow-prisoner wrote about his travels in French.

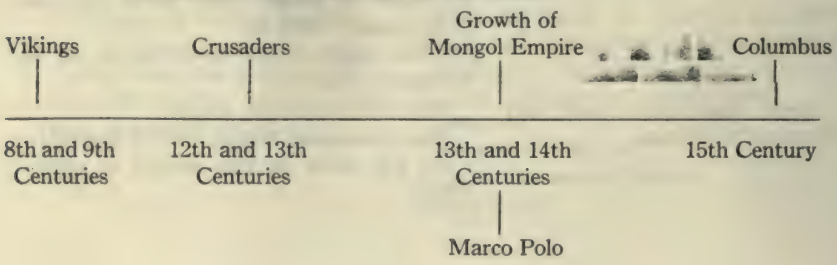
Do you think this was an advantage? How so?

Do you think people found out more about the world in those writings?

How would this be an advantage?

SUMMARY OF PLAN

I. Columbus in the fifteenth century.
II. Vikings in the eighth and ninth centuries.
    1. The influence their journeys and discoveries had on Europe.
III. The Crusaders in the twelfth and thirteenth centuries.
    1. The influence they had.
IV. The growth of the Mongol Empire in thirteenth and fourteenth centuries.
    1. The influence it had.
V. Marco Polo in thirteenth and fourteenth centuries.
    1. The influence his travels had on the world.



HISTORY: GRAMMAR GRADES*

THE TEACHING OF HISTORY IN THE GRAMMAR GRADES: SOME SUGGESTIONS

A New Point of View. The following excerpts are taken from the chapter "History for the Common Man" in *The New History* by James Harvey Robinson, published by the Macmillan Company, and used with the permission of the author. In this, *our day*, science and industry, hand in hand, are playing such important roles that they have revolutionized social, industrial and commercial ways. Professor Robinson discusses the changed and changing interests of the present age and asks of the past an explanation of the present, suggesting the kind of information we need to cull from history to explain why we today are as we are and contrasting it with the useless information we so frequently get from the records of past events:

HISTORY OF THE COMMON MAN

Should a student of the past be asked what he regarded as the most original and far-reaching discovery of modern times, he might reply with some assurance that it is our growing realization of the fundamental importance and absorbing interest of common men and common things. Our democracy, with all its hopes and aspirations, is based on an appreciation of common men; our science, with all its achievements and prospects, is based on the appreciation of common things.

It is our present business to see what can be done for that very large class of boys and girls who must take up the burden of life prematurely and who must look forward to earning their livelihood by the work of their hands. But education has not been wont until recently to reckon seriously with the common man who must do common things. It has presupposed leisure and freedom from the pressing cares of life.

This conception can be traced back to the Greeks, who established the tradition that education should be "liberal" and based on "liberal arts," by which they meant those studies and that training which they believed appropriate for a freeman who was supported by slaves and who had before him a life of leisure. When a particular study suggested in any way practical usefulness, it lost forthwith its "liberal" character, for it could only be advantageous to a slave. It has proved very difficult to get away from this long cherished conception of education, for we do not realize vividly enough the changes which have taken place since Aristotle painted his portrait of the "highminded" man. The Greeks had neither democracy in our sense of the term, nor natural science as we understand it, with its multiform applications to life. Slavery has disappeared, and the ancient occupations of the slave have undergone

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such a revolution, have been so diversified and shown such possibilities of improvement with the advance of scientific discovery, that modern industry bears little resemblance to the simple handicrafts of earlier times. Industry has become exceedingly interesting and worthy. We have no right to exclude it from our education as the Greeks did.

With this conviction firmly implanted in my mind, I propose to point out the rôle that history may be made to play in the education of boys and girls who are being taught to manage machinery and carry on other industrial operations with the immediate end of supporting themselves. When I first began teaching history, I must admit that I did not see its uses very clearly. This was due largely to the fact that I had a very inadequate notion of what the past of mankind really means for us. I have gradually come to realize how completely we are dependent upon the past for our knowledge and our ideals; how it alone can explain why we are what we are; and why we do as we do.

History, too, is in this sense not fixed and immutable, but ever changing. Each age has a perfect right to select from the annals of mankind those facts that seem to have a particular bearing on the matters it has at heart. And so it has come about, as Maeterlinck has pointed out, that, with increasing insight, historic facts "which seemed to be graven forever on the stone and bronze of the past will assume an entirely different aspect, will return to life and leap into movement, bringing vaster and more courageous counsels."

This is a very important point, and I am anxious to emphasize it before I go on, for I have no idea of recommending for industrial schools the particular kind of history that commonly goes by that name, since it is not suitable for our purposes. Our so-called standard works on history deal at length with kings and popes, with courtiers and statesmen, with wars waged for territory or thrones, with laws passed by princes and parliaments. But these matters form only a very small part of history, for the historian may elect to describe a Roman villa or a primitive steam engine, or contrast the theology of Luther with that of St. Thomas Aquinas; he can trace the origin of Gothic architecture or of the Egyptian calendar, portray the infatuation of Henry VIII for Anne Boleyn, or Bismarck's attitude toward the socialists, or the hatchets of neolithic man. This list of illustrations but feebly suggests the range and inexhaustible variety of man's interests and achievements. Some of these things are usually included in our textbooks, some are not.

What assurance have we that, from the boundless wealth of the past, the most important and pertinent experiences of mankind have been sifted out and brought into due prominence by those who popularize history and squeeze it into such compendious forms as they believe best adapted to the instruction of youth? I think that we have no such assurance. Voltaire long ago pronounced history to be simply a tale that we have agreed upon—*une fable convenue.*

Until recently the main thread selected was political. Almost everything was classed under kings' reigns; and the policy of their governments and the wars in which they became involved were the favorite subjects of discussion. Political history is the easiest kind of history to write; it lends itself to accurate chronological arrangement, just because it deals mainly with events rather than conditions. It must, moreover, have seemed more important to readers when kings and courts were far more conspicuous than they now are, and when fighting was regarded as the one unmistakably genteel pursuit of the leisure classes.

It is clear that our interests are changing, and consequently the kind of questions that we ask the past to answer. But I think that this process of eliminating the old

and substituting the new might be carried much farther; that our best manuals are still crowded with facts that are not worth bringing to the attention of our boys and girls and that they still omit in a large measure those things that are best worth telling.

In order to make the situation quite clear, let us imagine that some broad-minded and sympathetic spirit, deeply impressed with the tasks that face us today—like Maeterlinck himself, for instance—had managed to learn a great deal about the past of mankind without ever looking into a standard history or an historical manual great or small; that he had been guided miraculously to the real sources of historical knowledge and had familiarized himself with all the vestiges of the past thought and activities of mankind, not only the written records, but the remains of buildings, pictures, clothing, tools, and ornaments. Let us suppose, then, that he undertook to prepare a book for children, in which he proposed to tell them what he believed would be most interesting to them, and most illuminating, as they grew up and began to play their respective parts in social life. Would he dream of including the battle of Aegospotami, the Samnite wars, the siege of Numantia by the Romans, the crimes of Nero, the Italian campaigns of Frederick Barbarossa, the six wives of Henry VIII, or the battles of the Thirty Years' War? It is tolerably safe to say that none of these things, which our manuals always include, would even occur to him as he thought over all that man had done and thought and suffered and dreamed through thousands of years.

Our writer, not being especially interested in battles and sieges or the conduct of kings, and having no idea of teaching his readers how to be good generals and statesmen, would in all probability select some other thread for his narrative than the old political one. He might decide that what men knew of the world, or what they believed to be their duty, or what they made with their hands, or the nature and style of their buildings, whether private or public, were far more suggestive to us than their rulers at particular times or the wars that they waged. So in considering the place to be assigned to history in industrial education, I have no intention, as I have already said, of advocating what has hitherto commonly passed for an outline of history. On the contrary, I suggest that we take up the whole problem afresh, freed for the moment from our impressions of "history" vulgarly so-called.

Let us begin by asking ourselves what, considering the needs, capacity, interest, and future career of the boys and girls in industrial schools, is it most necessary for them to know of the past in order to be as intelligent, efficient, and happy as possible in the life they must lead and the work they must do? In order to answer this question intelligently, we must first determine the position in which the pupils are placed, and the nature of the demands which their special kind of education imposes. Secondly, I propose to give some illustrations of those things in the social memory of mankind which are most essential for them to know and recall from time to time, and which I venture to think will prove more enlightening than any other information that can be given them.

History alone can explain the machinery which the operative must tend. It is the very last link in a chain of marvelous discoveries reaching back hundreds of thousands of years to the bits of flint which were among man's earliest implements and which may have started him on his long career of mechanical invention and social development. The operative will learn from history how the present division of labor, of which he seems to be the helpless victim, has come about; he will perceive its vast social significance and will comprehend the rather hard terms on which things get made rapidly, cheaply, and in great quantities. An understanding of this may

suggest ways in which as he grows older, he can become influential in bettering the lot of himself and his fellows without seriously diminishing the output; and conciliate economic efficiency with the welfare of the workmen—which is, after all, as important a problem as exists in industrial life.

For example, it seems to an outsider as stupid as it is disastrous that, with the simplification of processes through the division of labor, there has not been a countervailing tendency to enable the workman to carry on in succession a series of contributions to the completed product. The grinding monotony might be relieved, from time to time, by a reasonable alternation of duties so as to bring into play a new set of muscles and of mental adjustments. There are, assuredly, a considerable number of disadvantages in prevailing practices which a more intelligent, sympathetic, and alert set of workmen could co-operate in abolishing or alleviating without serious economic sacrifice.

Besides giving the artisan an idea of social progress and its possibilities, history will furnish him a background of incidental information which he can utilize in his daily surroundings, and which will arouse and foster his imagination by carrying him, in thought, far beyond the narrow confines of his factory. It is impossible to do more than enumerate a few of the most conspicuous and impressive facts in man's development, which would arouse the attention of the boys and girls, and might, as the years went on, give them an outlook in life that they would get in no other way. We might begin with the well-known fact that man is by no means the only artisan in our world. Without his tools, he would be unable to compete with the spider, the bee, or the wasp. Certain birds construct very elaborate dwellings for themselves and their families, but man's ancestors, to judge from his nearest relatives which exist today, could do no more than make a rude platform of boughs. When our distant forb ars began to walk firmly on their hind legs and thus found their hands free, then it was that their good, big brains began to undergo those changes that make them so superior to those of the highest apes. In this long process we may assume that two factors have been specially potent in developing the peculiarly human heritage of culture, as distinguished from the instinctive and often marvelous skill of other animals: these are language and the invention of tools.

In the beginning, man was a far more clumsy and inefficient artisan than the wasp; but he had the great advantage, if he happened to be particularly clever, of being able, not only to do something from time to time that his ancestors had never done, but to transmit this improvement to succeeding generations. How the wasp developed its skill we do not know; but, as it now is, so it remains—it neither increases nor declines, as does human culture, for the simple reason that it does not have to be taught to each generation by the last. Could we imagine a child today growing up absolutely untaught and unaffected by the example of those around him, he would, in all probability, be little superior in point of civilization to a baboon. In short, our achievements are not innate,—we owe practically all of them to past generations. The accumulation of culture and its transmission by education in the widest sense of the word is the chief distinction and duty of our species. A great part of our development, and a great part of the heritage that has been transmitted to us from age to age, is associated with our implements. By his tools man can be traced back thru hundreds of thousands of years. Indeed, only the stones and bits of flint that he modified to his uses survive from the very remote periods. The French anthropologists have established a succession of eras in the history of the old stone men, based on the variety and finish of their implements. The history of man, then, begins with his industries; and I am not sure that his industries, in a broad sense of the term,

have not always constituted as good a single test of his general civilization and as satisfactory a clue to its vicissitudes as can be found.

After the last advance of the ice sheet in Europe, and perhaps not more than seven to ten thousand years ago, the so-called "neolithic" phase of civilization clearly emerges, with its ground stone implements, its pottery, agriculture, and domestic animals. This stage, before the gradual introduction of metals, seems to have prevailed generally in both the old world and the new. It lies back of the civilization of Egypt and Babylonia; it was the condition in which the Europeans found the peoples of America, four centuries ago; and it may still be studied in various parts of the earth where it continues to exist. There should be no difficulty in explaining vividly to the child this intermediate grade of civilization,—so complicated from the standpoint of the chimpanzee, so simple from the standpoint of that of Greece or Rome.

The recent discoveries in Egypt indicate that some four thousand years before Christ a marked advance beyond the neolithic age had already taken place there. A rapid and graceful system of writing had been developed, copper was beginning to be used for vessels, and, when properly hardened, it became available for tools. The ancient Egyptian seems to have been an ever industrious and practical person, to whom business made a strong appeal. The bookkeeper is a conspicuous figure in the paintings which have come down to us.

The range of Greek manufactures might also easily be brought into instructive relation with both their art and their conceptions of life, in such a way as to give a far more adequate notion of this extraordinary people than one is likely to derive from the textbooks that tell of their political assemblies and constant wars. We still have many examples of their lovely vases and cups and platters, their bracelets, earrings, and mirrors. We can form an excellent idea of their furniture as well as of their temples and theatres.

While the Greeks prized beautiful things as no other people before them, so far as we know, manual labor was viewed with contempt by the leisure class. This could not be otherwise at a time when almost all industrial operations were carried on by slaves, a class constantly recruited by captives, and sufficiently large to manufacture all the necessary commodities. Seneca repudiates with warmth the idea that the practical a ts were invented by men of exceptional genius. He declares that, on the contrary, they are vulgar devices of the lowest of humanity, and should be left to slaves. Moreover, Aristotle, in his Metaphysics, speaks as if all possible practical inventions had long ago been made. So the philosophers and the institution of slavery combined in ancient Greece to discredit industry. Thus it came about that the use of one's hands and head in the making of useful articles was condemned as degrading; and the more completely one could free himself from such useful employment, the more prospect he had of rising to the full dignity of a man and a philosopher.

The Romans took over the Greek industries that suited their purposes, and these were transmitted to medieval Europe, with such modifications as change of taste and alterations in the general habits of life called for. The growth of the towns in the twelfth century was accompanied by interesting developments of craft guilds, and the master workmen in the various trades began to play a far more important and dignified role in public affairs than ever before. Moreover, the common artisan ceased to be a slave, or even a serf, so that one of the gravest disadvantages attaching to manual labor in Greece and Rome disappeared in western Europe five or six centuries ago. The beginning of this rehabilitation of industry is, perhaps, reflected

in the prevalence of surnames derived from homely occupations. The time came when no one was ashamed to be called Taylor, Turner, Weaver, Smith, Fuller, Cooper, Brewster, Hooper, Chandler, Fletcher, Potter, Horner, or Currier.

From the thirteenth century on, there began to be premonitions that industry might sometime be revolutionized by new discoveries. A method of smelting iron was discovered, for instance, so that it could be cast, instead of forged, after merely softening, as previously. The alchemist, in his search for an elixir which would turn copper into gold, and lead into silver, and prolong life indefinitely, came upon hitherto unsuspected properties in the substances he experimented with and so laid the foundations for what was becoming applied chemistry. Yet no very striking changes in industry occurred before the eighteenth century. In the days of Louis XIV, when inventors were already becoming rather common, the people of western Europe still continued to spin and weave with very simple devices. Merchandise was still carried about on slow carts, and letters were as long getting from London to Rome as in the time of Constantine.

But two great truths were gradually dawning on the more thoughtful. One was the importance of the seemingly homely, common, and inconspicuous things about them; the other was the possibility of making use of our knowledge of common things to promote the general welfare. Neither the ancient nor the medieval thinkers had paid much attention to the material world. They withdrew themselves from nature, and, as Lord Bacon said, they "tumbled up and down in their own reason and conceits," and sought the truth in their own little heads and not in the great common world about them. When men of first-rate ability turned from a consideration of the good, the true, and the beautiful, and of the precise relation of the three members of the Trinity to one another, and began to wonder what makes milk sour quicker in hot weather than in cool, and why an object seen through a glass bottle is magnified, they had already made the transition from the old to the new attitude of mind.

Patient observation, experimentation, and calculation, in the spirit of modern research, did not begin to be carried on in Europe, on a large scale, before the opening of the seventeenth century; and since that time the progress in accumulating knowledge and applying it to the relief of man's estate has been absolutely without precedent in the history of the globe. The story of modern invention and of its revolutionary effect on our life and our ideals of progress cannot be even sketched out here. But it is infinitely more absorbing and vital than the record of kings, conquests and treaties, and of the deliberations and decrees of public assemblies, which have so long been regarded as constituting orthodox history.

Moreover what child could fail to follow eagerly, if the matter were but clearly put to him, the marvelous doings of the steam engine, which has shown itself far more potent to alter man's ways than all the edicts of all the kings and parliaments that have ever existed? In 1704, an Englishman, Newcomen, devised an awkward form of steam engine, which would work a pump—a lumbering, slow, inefficient, unpromising contrivance, which was destined, nevertheless, to grow into the most rapidly revolutionizing force in the history of the world. The pump enabled the miners to keep under control the water that would otherwise have impeded them in extracting both coal and iron. By the use of the iron, new machines could be made, and with the coal, they could be run. So, with iron and coal and steam both old and new kinds of products could be turned out in unprecedented quantities; and with iron, coal and steam they could be dispatched to all parts of the earth. Factories equipped with the new machinery grew up, and cities centered around the factories. So it has come about that the tool has again come into .ts own as the agent and symbol of

man's progress, and that the past one hundred and fifty years have seen vastly greater changes than the whole five thousand years that elapsed between the reign of King Menes I of Egypt and that of George III of England. Just as the use of a stick and a piece of flint began the intellectual development which slowly raised man above the ape in his habits of life, so a new method of operating his tools—the steam engine—ushered in an expansion of his activities, interests, and social and moral problems, the end of which is not yet.

As we are all keenly and sadly aware, the Industrial Revolution, while greatly adding to our comforts and to the range of our experiences by bringing the whole world together and rendering it in a certain sense accessible to all of us through easy and rapid intercommunication, has left the mass of workers whose lives are passed in factories in almost a worse plight than that of the Greek and Roman slaves. It was evidently too much to expect of our western world that it should effect such an absolutely unprecedented metamorphosis of the material conditions of life, and at the same time guard against all the evils to which the tremendous changes involved might give rise. Long hours of monotonous mechanical work in tending a tireless machine or in repeating some minute operation in the highly efficient but often inhuman division of labor on which our modern industrial system rests, together with insufficient and precarious wages and demoralizing concomitant conditions, form at present the debit side of the balance sheet.

As an offset, promising speedy betterment, we have a growing sense of social justice, a higher appreciation of economic and social expediency, and an enthusiasm for democratic education. The unthinking charity of the Middle Age has become the organized social work of today, which is begotten and fostered by a union of human sympathy and exacting scientific research. If the machine has produced a new form of slavery, it has also produced its antidote. It holds out the possibility of abolishing poverty altogether, in the sense of suffering from hunger, cold, and nakedness. For there is now energy enough at man's disposal, in steam and electricity, to supply him with the necessities of life in such abundance that, if properly distributed, no one need be in physical want. What is still more fundamental, with the Industrial Revolution has come a respect, not to say veneration, for labor, which Aristotle would hardly have comprehended. Instead of dreaming of a perfect existence, free from all participation in the task of supplying our material needs, Tolstoi and many others see the ideal life in a happy combination of useful manual labor and leisure. The effect on body, mind, and temper of productive manual work, carried on intelligently, under suitable conditions, and for periods adjusted to the strength of the worker and to his other duties in life, would unquestionably be most salutary. And while we have not yet arrived at this happy adjustment, except in rare cases, we at least no longer scorn manual labor as such, nor do we deem it inherently degrading.

Let us return now to the question of the relation of all this to industrial education, which is in itself but the latest product of the long historic process which we have been tracing. To me it seems obvious that just the sort of facts that we have been reviewing are precisely those which we should be particularly anxious that the boys and girls in the industrial school be aware of and should lay to heart, in order to gain that attitude of mind which not only would make them the best kind of artisans, but would give them an intelligent appreciation of their work and enable them to co-operate in the process of eliminating the evils from which they suffer. And how can these facts be so easily, so permanently, and so naturally impressed on the pupil's mind as by the kind of historical study which has been outlined in this brief summary of the long story of manual labor? Such study will not only meet the special needs of those

whose education we are discussing, but it will furnish at the same time the best, perhaps the only, means of cultivating the breadth of view, moral and intellectual perspective, and enthusiasm for progress which must always come with a perception of the relation of the present to the past.

I. Aims and Values: What is it that history alone can contribute to the education of the human being that no other subject in the curriculum can? What can it contribute to a greater extent than any other subject? Prof. Henry Johnson in *The Teaching of History* [1915] answers these questions:

History of the scientific type is dominated . . . by the idea of development. From this point of view, nothing either was or is, everything either was or is in a continuous process of becoming. Here then is a conception that renders history not only unique but indispensable, and makes clear at once the most fundamental and the most comprehensive aim that can be formulated for historical instruction, namely to make the world intelligible. . . .

The world to be made intell gible through school instruction in history, is the general soc.al and political world. The more special forms of development enter only as they affect that world in general. The mode of procedure is obviously to exhibit successive soc.eties in action, to convey by means of concrete examples definite impressions of human beings, liv.ng together, making peace, organizing a church, constructing a government, demanding higher wages, obeying or defying social conventions, seeking amusement—impressions, that is, of what society has been and is, how society works, and what the causes and consequences of social action are. Such may properly be the controlling aim of historical instruction, for it meets a fundamental need and meets it in a way that only historical instruction can meet it. . . .

In the first place, the facts must be h storical and must be recognized by the pupil as historical. Th.s impl es some consciousness of historical evidence and requires the introduction of exercises to develop the consciousness.

In the second place, differences in peoples, customs, and institutions must be emphasized. History is occupied fundamentally with differences. If the present were not d fferent from the past there could be no history. The conception of our own interests, problems, and standa ds of judgment as different from those of the past is a necessary step toward understanding our own interests, problems and standards. In taking this step the mind acquires at the same time the larger vision that should dispel provincialism and may affect conduct.

In the third place, the idea of change must be emphasized. Development is change, and a changing social world can be made intelligible only by reference to antecedent changes. . . . Yet change is often dimly perceived by those who have studied history. The notion that we run, or should run the same course that our fathers have run per ists in spite of our accumulating evidence to the contrary. There are serious statesmen who measure the United States of 1915 by the standards of 1789. . . . The immediate effect upon the pupil of feeling that he is living in the midst of progress is to give him a better appreciation of the present and of the larger opportunity that awaits him in the fu ure.

II. The Problem of Grading History: What are the A B C's of history? The matter is not so easy to determine as it seems to be for mathematics or geography. Professor Johnson's opinion is:

Particular facts relating to external conditions and activities are plainly the A B C's of history. They are the facts most readily apprehended. They can, without

prohibitive strain on the intelligence be so treated as to bring out from the beginning differences in conditions and thus be made to illustrate the fundamental historical idea of change in the world. They can be so selected as to cultivate from the beginning a sense of proportion. . . . It is among the merits of externals of normal life in the past—buildings, clothing, food, tools, roads, bridges, conveyances, weapons, occupations, amusements—that they are, as a rule sufficiently different from those of the present to produce, without over-emphasis upon what is exceptional and extreme, that effect of picturesqueness which is deemed essential in arousing the interest of pupils. This makes it possible to look in a serious way for facts that are really characteristic of former times and to seek in characteristic facts for the really characteristic elements. Even the fundamental historical idea of continuity can to some extent be illustrated. All that is necessary is to present action following action, to make the story of action a continuous story, to give it a beginning, a middle, and an ending, and to apply the same principle to a series of stories. Finally, external conditions and activities are the key to such mental experiences as are admissible for beginners.

If the views here presented are correct, the general distinction between elementary history and more advanced history is fairly clear. Elementary history is made up essentially of particular facts. It is history presented in the form of concrete examples—actual remains, physical representations of actual remains and of actions, verbal description rich in material for imagery. Advanced history is history presented in the form of general concepts. . . .

The problem of adapting history to the schoolroom is, therefore, essentially a problem in presentation. *Facts presented concretely are elementary; facts presented abstractly are advanced.* For the earlier years of the elementary school, history should be made up essentially of concrete examples. It should be descriptive and narrative rather than analytical. Generalizations when introduced should be of a kind that can be readily resolved into concrete particulars. This does not mean that history in the elementary school must be a series of pictures and that children should have no opportunity to reason, to generalize, and to apply their conclusions. It only means that the data for reasoning, for generalization, and for application must be concrete data. History thus constructed and thus presented for five and six years will lead naturally in the upper grades to history more largely made up of collective or general facts. With pupils of ten or eleven, concrete particulars must still be paramount; with pupils of seventeen or eighteen, concrete particulars must still be continued, but discussion should and may turn largely on generalized history. (*The Teaching of History*, pp. 48–51.)

III. Some of the Various Aspects of History:

One of the fundamental problems is *what to teach.* History is the whole story of man in society, and we may study any of its numerous aspects that we wish to investigate and work on as long as there is any evidence available from which we can learn. The phases of history that have been most studied are the political and the military—the story of kings and presidents, statesmen and generals, the rivalries and quarrels of states, battles and sieges. But one may also seek to know how men have gained their living and increased their comfort, the story of industry and property, the way in which the world's work has been done; or the story of the classes of society, and how it happened that there is a great wage-earning class with special problems, working to improve the lot of its members; or what men have thought about their place in the world and universe and how they should regard the problems

of life; or how men have at different times sought to train the young and prepare them for their serious work in life. One might study the history of fine arts, or of costumes, or of amusements, or of cooking.

The question of what is of most value for the children of the elementary school must be determined on the broad basis of the aims of education in general and of the study of history in particular. [See section on Aims and Values (pp. 480–481) and Professor Robinson's chapter on History for the Common Man (pp. 473–480)]. For any large topic a test to consider is whether it helps to explain anything in the life of our own times, not necessarily in a direct way, but whether it helps to show where some condition or problem of today comes from and why we have it in the form we do.

Looking at the matter from this point of view we at once perceive that a history course dealing largely or wholly with politics and wars, to the neglect of industrial, social, intellectual, and educational history, will fail to offer the least help on many of the most important aspects of the world in which we live. Some attention to these other phases will be needed if we wish to get from the history work anything like its full value. Even if something has to be sacrificed in the matter of romance and the picturesque, one cannot be guided simply by the test of what is most entertaining; but the fact is that there is much greater opportunity for highly interesting stories, work appealing to human interests, in social and industrial history, than is commonly supposed by teachers who have made no study of the possibilities. Almost every one of the recent textbooks shows the newer tendencies.

What should be done about the history of wars? This subject is being most severely reduced in the readjustments. Opinions differ as to whether the study of the military phase should be actually discouraged, but in planning a course of study the question is one of relative values. How can the available time be used to best advantage? With so much of genuine worth that may be done, there can be no question that the time that has until recently been devoted to battles and campaigns, especially for the Revolution and the Civil War, ought to be greatly reduced. Some suggestions are given in the Outlines. In general, a good procedure is to take time for nothing more than (1) a study of the geographical setting for the war and the nature of the military problems that each side must face, (2) the main outline of the chief campaigns undertaken with the degree of success or failure, (3) the study of one or two typical battles. Of course the cruel, brutal, exhausting, and sordid side of war as well as the heroic and romantic should be brought out.

Care should be taken not to study the various aspects of history as if they had no relation to each other. Politics, wars, industry and business, social ideals and customs, all influence and help to determine each other.—Gambrill.

IV. Biographies: Usually teachers go to extremes about the use of biographies, overdoing them in Grades 1–6 and almost wholly neglecting them in Grades 7–8. An individual is not necessarily more concrete than his time, and certainly seeing the life of a people, or a great movement, or a great war through one or even several individuals means a rather limited survey. "Biography on the whole, can be made more historical by making it more biographical, by grouping men about events rather than events about men, and by studying men first of all as men."

Personal studies of the leading men of a period is an invaluable aid to making that period seem real and vital particularly to chil-

dren of the seventh and eighth grades who are beginning to be very much interested in personalities. One difficulty lies in getting the descriptions of characteristics of prominent men and women, and of interesting incidents that will bring out characteristics; for this greater library facilities are necessary than are found in most schools. Standard biographies ought to furnish the necessary data and this matter of personal study could well be planned as report work, one pupil being responsible for describing one personality; another pupil, for a different personality; and so on—the burden of collateral reading thus being distributed among the members of the class. Seventh and eighth grade pupils might be called upon to assist the fourth and fifth grade teachers in this matter; it would be good practice for an eighth grade girl or boy to make Benjamin Franklin "real" to a fourth grade child; or General Nathaniel Greene to a fifth grade child. [For an interesting chapter on this subject read Johnson: *The Teaching of History*, pp. 161–178.]

V. Use of the Textbook. In the choice of a basal text for a grade, or for a topic, many elements enter. A textbook, no matter how carefully selected, can seldom contain all the information necessary for any topic; and since textbooks necessarily must be written with the universal child [if there be such a person] in mind, some irrelevant information is often included for the child of the immediate locality. What is to be done? The only plan to follow is to discard parts of the text, if they are not needed, and supplement the work with collateral reading. With one well selected basal text for the grade, with library facilities in the school-building that supply books for collateral reading and report work, with aid from the public libraries, the Sunday School libraries [if they can give any], and the libraries in the homes of the pupils, with current magazines and newspapers—the teacher will carry on her work.

How to use the text-book is determined by an understanding of teaching children how to study.

Factors in Teaching "How to Study"

Note: This topic applies to geography as well as history; indeed, to all the subjects in which study assignments are made and discussed.

1. Mechanics that aid in the use of text-books.

An understanding and intelligent use of title-page, preface, index, table of contents, and appendix of a book.

2. Factors in study:

a. Clear statement of problem or assignment:

The type of assignment is a determinating factor for study at home or in school.

b. Problems should arise in any lesson that cannot then be solved—these should be assigned immediately for study:

Culmination of a lesson ought to mean a summary of what has been stated, but also a formulation of the questions yet unsolved. Many of these should have been raised by the class

c. Individual or group assighments for repeat work.

d. Recalling the problem many times in the course of the recitation to test whether progress of the lesson shows continuity and unity.

e. Doubting or challenging, not accepting the thinking of others; search for truth

f. Verifying:

Using other texts, dictionaries, encyclopedia, gazetteers, year-books.

g. Noting the books that give information:

Bibliographies.

h. Taking notes, annotations, outlines.

i. The child should be made conscious of the need of discrimination.

Not all of any book is needed.

j. Understand that a definite answer cannot be given to all questions.

k. Memorize thought.

[1] understanding [thinking it over]; [2] analyzing into the principal thought units; [3] seeing the whole as a richer thing, in relation to its parts and to other like or unlike wholes.

l. Habit for questioning to be set up.

[1] carefulness about details; [2] critical judgment, [3] ability to ask thoughtful and challenging questions; [4] the desire to use only reliable texts; [5] the right system of taking notes and making outlines; etc.

Supervised Study Assignments and Independent Study Assignments: In one history lesson-movement, covering a period of, say, five lessons in the seventh grade, based upon a problem-topic, the teacher's study assignments should serve as a basis for a later analysis with her pupils about their methods of study. In the study-periods the pupil must look up references, evaluate facts, confront new problems that arise, note his own misconceptions, consult bibliographies for concrete source-materials, and arrange his data to be brought to class for discussion. Almost every history lesson thus becomes a directed or supervised study lesson.

Now, when an independent history study lesson is assigned to test habits of study that have been gained by the class from the rich suggestions for developing study ideas that have been worked out between pupil and teacher together, the pupil will make his selection, and study accordingly. For example, suppose a class in the seventh grade is assigned to study independently the First Continental Congress, with these directions:

1. How shall this lesson be conducted when we take it up in the class room?

2. Find information-materials and bring them to class when you are ready for the discussion.

3. Note all points you do not understand, and be ready to ask any questions that you think are pertinent to the topic.

Might not the mental process the child will go through, when he is left to himself, be something like this?—

"This is a congress, called together for the purpose of discussing the Boston Port Bill, and other Intolerable Acts imposed upon the Americans by the British Parliament. We can learn more from a dramatization of this Congress than in any other way. Such a plan will help us to remember the leading men who were present; we will have to look up their biographies, in order to see if we can find any special speeches they made. We will have to find whether our own text gives much information. We ought to have the document that grew out of this Congress. We ought to have the minutes of the Congress, if we can get them. This is the way we studied the Albany Congress and we had a most interesting time with it. I think no better way can be found for such congresses than to dramatize them."

Now, what happened when the child, studying independently, thought this out for himself? He really was imitating a method of study procedure that the teacher had disclosed to him from a previous history project.

All through the elementary school, study-lessons should be directed as seat-work preparations for recitation lessons. Indeed, most of the recitation lessons should be supervised study lessons.

VI. Reference Books: Collateral Reading. The matter of interesting and vital reference works to supplement a text, is a very important factor in the teaching of history. Another, quite as vital, is the use of these interesting books after they are selected. Children at least as early as the fifth grade may be taught to use the table of contents and index, and to follow the footnotes.

Reports on assigned topics or problems can then be made by groups of children, some using one reference, some another.

Henry Johnson, in *The Problem of Adapting History to Children in the Elementary School*, says: "Doubts may, with profit, occasionally be raised in the minds of children as to the unerring accuracy of books . . . . . There are doubts. What shall be done with them? Shall they be ignored? Shall they be covered by the dogmatism of the author? Suppose the assurance is in the writer and not in the knowledge, that what he writes is history only in the sense of *his story*, with the emphasis upon the *his*. Is it wholly beyond the province of elementary instruction to take any account of what histories are made, of what is involved in reading them intelligently?"

Let us set up a reasonable amount of doubt then in our own minds as well as in those of our pupils. The definitive word has seldom been said about an event in history. It is much better to hear in class discussions some such remarks made by the pupils as "Well, Fiske says this," or "Parkman says that," than it is to have

the pupils submit to one point of view because no other point of view has been afforded them.

VII. The Idea of Place and Distance. Distance or spacial apprehension develops much earlier than the perception of time. It is brought out "by the force of circumstances which requires the child to find his way about his environment. Only those distances which we have actually traversed are properly understood by us; of others which we have not experienced we can hardly have an adequate idea. . . . The comprehension of perspective representation is, as a rule, but moderately developed in six-year children. When children are required to interpret pictures spacially they frequently assign quite the reverse meanings to the spacial relations." [Rusk: *Introduction to Experimental Education*, [Longmans] pp. 64–65.]

" 'Down town,' 'across the river,' 'up the road,' have a meaning. Five hundred miles away often has not. Often all distances of more than a few miles are alike only 'a long way off.' But children learn comparatively early to read maps, and, if accustomed from the first to visualize the material background of history, are in a position by the age of ten or eleven to deal with the place relation as they deal with the time relation."—Johnson.

VIII. Maps. *See that the developing child gets the map habit.* Geography and history should go hand in hand. One feels like going so far as to say that seldom should there be a history lesson in which geographical conditions play an important part without a *wall map, an outline wall map,* and *a pupil's outline desk map.* Physical maps should be used throughout the study of a topic in which the physical environment is known to have affected the life of the people. The Sydow-Habenicht physical maps now in use in our schools are unusually clear, attractive and illuminating for history purposes. The McKinley Publishing Company of Philadelphia furnishes outline wall-maps for 18 cents in quantities, and desk outline-maps for 32 cents, 45 cents, and 77 cents per hundred according to size. The United States Geological Survey publishes quadrangle maps of small areas that can be purchased at 10 cents each.

A word should be said about the use of contemporary maps; they are at times absolutely necessary for the understanding of the situations involved in boundaries and treaties.

There is a place in history for the quick sketch-map drawn from memory. It is a "test of control" of certain phases of knowledge involving particularly the place relations so necessary to an understanding of history.

W. R. Shepherd's *Historical Atlas* covers the whole range of history from the ancient Orient to the Panama Canal, and is almost indispensable for classroom use. (Out of print until after the present European War is over.) It contains over two hundred maps in color, which are exceptionally accurate and attractive (Henry Holt & Co.; $2.50 net). Other atlases are MacCoun: An Historical Geography of the United States (Silver, Burdett & Co., 90 cents); Dow: Atlas of European History (Holt); Everyman's Atlas (5 vols., 35 cents each, Dutton). A copy of the Foster "Historical Chart" has been placed in many of our schools as a part of the history teaching equipment. The grades—four to eight—should be using it whenever it meets their needs.

IX. Time-perception. Time perception develops much later than the spacial or place apprehension. "One hundred years ago cannot mean anything to the small child, indeed we are told that children of eight years cannot go beyond six months, everything before that seeming to be simply in the past. We may say that he can distinguish the relative position of near events, but distant events appear all in the same place, this plane receding with increasing experience."—Rusk.

Use the child's own life as a unit to get back of. The time string knotted at regular intervals, slips of paper, the line on the board or the time block, are devices that may be used to good advantage not only in the lower, but also in the upper grades. "By the age of ten or eleven, even children have counted enough days and experiences to realize the difference between the long ago to Washington and the long ago to Pericles sufficiently to justify the use of dates." —Johnson.

X. Dates. There has been a reaction against the memorizing of numerous dates, but we may easily swing too far to the other side. Let us distinguish between use and memorizing. A great number of dates may be put on the blackboard or otherwise used without any attempt to memorize them. Dating an event should be happening continually, not necessarily in exact figures, but by approximation and in relation to other events in point of time; for instance—"the discovery of America, 1492, marks approximately the close of the 15th century;" "Columbus was about nine years old when Prince Henry of Portugal died [1460];" "Clay, Calhoun, and Webster were born within four years of each other and all died about the same time [1850–1852]." A few exact significant dates should be known at the close of each year's study.

XI. "How we Know" the Facts of History. "A first grade can be led to see that something is learned about the Indians from things dug up out of the ground, something from writings of white men who reported what they saw, and something from stories told by Indians about themselves and later reported by white men. First grade children will themselves often suggest that the Indians did not write books. A fourth grade can be led to think of different ways of knowing about people, and the relative merits of the different ways of knowing about them. A sixth grade can be taught the use of indexes and tables of contents and something of the significance of references to authorities. A seventh grade can be led to solve some simple problems in *criticism*. From the first, there can be exercises involving essential aspects of the historical method of study from the research for material to the organization and exposition of results."—Johnson: *The Teaching of History*, p. 360.

XII. Correlation with Other Subjects.

1. *Geography:* Correlation here does not mean that history is to be determined by the other courses in the curriculum, nor the other courses determined by the history. History is taught as history; the *geography* that illumines history is the whole body of geographical knowledge that is taught through the geography topics; and when a special phase of it is needed for a history lesson such as reading a physical map or tracing out the lack of development of a people because of its physical surroundings—the geography study then becomes a matter of an aid to history and is taken up as a part of the progress of the lesson-movement of the history proper. So it is with English and literature, and the other subjects that history must call upon for help.

2. *English:* In the *English* periods the following devices might be used to reinforce the history work: keeping of journals or diaries; writing letters, the pupils imagining themselves in certain historic situations, for instance in Washington's Army at Valley Forge, or with Jefferson Davis at Columbia, South Carolina, after the fall of Fort Sumter; memorizing famous speeches; taking part in debates; dramatizing with historical accuracy, some of the most important of the world's events. A dramatization, well worked out, means hard work for the teacher. She must carefully select leaders, and provide more material for collateral reading than the ordinary school library affords if the details of the play are to be critically accurate.

3. *Civics.* Ideas of political parties, government, the constitution of the United States and its amendments, should be developed

as the national history is studied, and reviewed and applied to current situations in the *civics periods*. And, always, if possible, concrete evidences of civic problems immediately touching the life of the child should be made the point of departure for the work.

4. *Industrial Arts* [See Industrial Arts Course, pp. 639-671].

XIII. Further Aids.

1. *Construction work:* "Set free the *constructive activities* of the children and encourage them to reproduce as many of the objects of interest in the story as they can find tools and materials to shape; the building of the miniature forts, log huts, palisaded enclosures, caves, breastworks, canoes, boats, ships, costumes of explorers, scenes of Indian life, and other characteristic things."—McMurry.

2. *Source materials:* In contemporary diaries, letters, personal reminiscences, newspaper cartoons, and songs, the teacher will find a most useful fund of particulars about personalities and life of the time. The use of such *source materials*, however, demands some critical ability on the part of the teacher and some trouble to cull out parts the pupils can read with ease and profit. For helpful suggestions about the kinds and use of sources see Johnson, *The Teaching of History*, pp. 2, 4, 5, 6, 9, 196, 126, 371.

3. *Local traditions and stories:* Every neighborhood has a fund of *traditions* and *stories* about its immediate history. These should be used if possible, and wherever men and women are still living in the neighborhood who have taken part in a significant event, they should if possible, be asked to contribute to the history work of the school by speaking at the school assembly or by personal interview with the teacher and pupils.

4. *Excursions:* Probably no aid is so valuable and at the same time so little used in America as the history *excursion*. Occasionally we undertake a trip with the class to historic Annapolis, or to Washington, when Congress is in session; but this is usually done as a special reward to members of a seventh or eighth grade class, and seldom as a definitely expected and planned-for unit of work when the course for the year is being mapped out. Excursions can be of many kinds—to a monument just a block away from the school, a matter of a half hour or so of time; to a more distant point that might take the entire day with several days of study and preparation previous to the trip; to a more distant place, covering a larger period of time, even several days. Such excursions are seldom planned for the elementary school because of the difficulty involved in their management, and we usually think of such an excursion as belonging to the secondary school or the college field; but it is not

beyond possibility that history excursions will become in the future a more important part of our planned procedures.

5. *Concrete details:* Just what is a *concrete detail?* It is a particular, single thing whether it be an idea or an object; and should be clearly differentiated from a generalization which sounds concrete but is not. Professor Johnson points out that a "King" may be anything but concrete to a child, and he warns us to analyze what such generalizations as "slave power in America," "ringing with applause," "Cotton is King," really mean to us. A picture of Washington's camp-chest with a minute description of its contents; John Hancock's every day coat of handsome scarlet velvet with ruffles on the sleeves stands out clearly when it is associated even with a Perry print of John Hancock himself; Washington's war horse "Nelson, a tall old sorrel with white face and legs," grazing luxuriously in the richest grass and clover Mount Vernon could afford, and upon whose back the "Commander-in-Chief of the American armies had received the surrender of Lord Cornwallis;" a letter from Jefferson Davis to Governor Pickens of South Carolina describing his difficulties about securing men and ammunition following the fall of Fort Sumter; the accurate reading of a physical map with some definite problem like "Cotton is King" in mind; a vivid word picture of a man's personal characteristics, or a battlefield, or a speech; a real situation—these are samples of concrete details without which history may be as meaningless to a child as abstract science is.

6. *Placing memorial tablets upon historic spots and buildings in the neighborhood:* The hunting out of an historic spot in the neighborhood and placing a memorial tablet or sign upon it could be made a great event in the life of the school. There is no neighborhood, no matter how apparently uninteresting, that has not a past history as vital as that of any well-known and sacred spot in the country. Not very long ago it was suggested to the principal of a school in a rural community that his pupils might work out the historical development of that section. In despair he said "There is nothing of historical interest here." A patron standing near replied "Our church is the second oldest Presbyterian church in the United States." The patron gave the keynote of interest and a task could have been marked out right there to verify the information (an example of a concrete lesson in historical evidence), to secure the co-operation of the vestry of the church in going over the records, to secure permission to put a tablet upon the church (the tablet to be designed in the fine arts period and made in the manual

training shop), and to plan for a day of celebration when the tablet was ready for unveiling which might indeed be the occasion for an historical revival for the whole neighborhood. Where the school cannot manage such projects alone it could, at least, start the movement which might then be left to women's clubs, civic associations, and farmer's granges to consummate.

7. *Pictures, Casts, Models, Museums:* Encourage the collection of pictures, for pictorial representations aid the imagination to reconstruct the past as no other medium can. But it is not enough just to make a collection of any and all sorts of pictures, they must be accurate just as sources and historical evidence must be; and besides they must be used thoughtfully and intelligently. It is even conceivable that several days might be spent upon the study of the same pictures, for pictures may be as much the source of information as the printed page. The pictorial illustrations in the text-book should be made use of if they have any direct connection with the text; too frequently the text fails us here.

Models are more easily interpreted than pictures, but to produce the best results they must be of proper size and of accurate proportion. Prof. Johnson in *The Teaching of History*, pp. 202-268, devotes two chapters to the discussion of pictures, models, charts, museums, and maps. He says among other things that such materials as casts, models, pictures, charts, and maps can be arranged in a museum in historical order. This is shown in museums in Munich and Stockholm. In Stockholm, Sweden, the collection is very complete and because of it standards are historically altered. There is also an outdoor museum in Stockholm that represents a miniature Sweden by districts and periods; houses, furniture, books, costumes, crops, birds, animals, etc.

In America the historical museum at Doylestown, Pennsylvania, is perhaps the most interesting. It collects materials showing the historical development of such things as transportation, lights, etc. In some respects it rivals Stockholm, though its scope is narrower. Something is being done with this idea in the National Museum at Washington.

Use the Stereoscope; those of Underwood and Underwood are the best, on the whole. There are books to accompany the pictures, with maps.

The reflectoscopes and radiopticons of the Thompson Company are a good kind [Thompson Co., Madison Ave., and 23rd Street, New York.]; and the Buckeye Radiopticon, for postcards primarily, is a good machine for the purpose at $5.00.

The Hensell models [26 pieces] illustrate Greek and Roman History; the Gall and Rebhann models also illustrate ancient history; the Rausch models [more than 200 pieces] most of them illustrating general European history as well as German history, are all recommended. They are described in a catalogue [50 cts.] obtainable from the Stechert Company, New York City.

8. *Moving pictures and Phonographs:* Add to all the foregoing aids the possibilities of the moving picture machine, and the phonograph for "canning history" and we have a prospect for "making the past real" that is not beyond our fondest dreams.

XIV. Reviews and Examinations. In all reviews [the right kind of examination is really a review], the emphasis should be placed upon the relative *significance of events*, not upon pure memoriter facts. A representative person who appears in several significant events will be reviewed by each event and seen in a new light in relation to the event; an event that has significances of several different kinds is reviewed each time it comes up and a new significance is added to it. Ex. The story of "The coming of the factory to America" will bring out several inventors; it will also need to be recalled in discussing the "Labor Movement," and in dealing with legislation about wages and workers.

In examinations, it is the use of historical knowledge that should be put to the test, if the examination is to be at all significant. An examination in geography given by one of our County principals about two years ago [1913] will illustrate the point:

Children of an eighth grade were asked to open their geographies to the graphs on a certain page; select a graph that had not been studied in class; organize a problem from it; draw a map illustrating the conditions of the problem; formulate an outline of topics for discussion that the problem demanded before it could be solved; and give a short list of reference books from their classroom experience that might be useful in solving the problem. Certainly such an assignment forms a basis for a most intelligent use of knowledge.

Of the history examination, Professor Johnson says:

"The memory test should not be allowed to dominate the history examination. It is, indeed, doubtful if more than a fourth, or perhaps a third, of the examination should be devoted to tests of ability to *remember*. The remainder of the paper could then be devoted to tests of ability to *do;* to interpret a map or picture; to analyze a paragraph or a page of history; to find materials on a given topic; to solve by use of given materials a simple problem in criticism; to recognize in given facts differing degrees of probability; to judge

from a given description some historical character; to discover in given conditions, past and present, resemblances, differences, relations, tendencies; to organize a given collection of facts; to select from the work of a term or a year, facts of special importance and to explain why they are important."

XV. The Celebration of Holidays. No mention is made in the outlines for the various grades of the celebration of holidays. One plan for the holidays should be followed in all the grammar grades. Too often the celebration of a holiday is made the occasion to break the continuity of the history program by introducing history pertaining to the holiday in question, which is studied for several weeks, or perhaps the entire month, before the holiday celebration. A general hodge-podge is often the result. Take, as an example, the Sixth Grade course—imagine a month of Colonial history in preparation for the Thanksgiving celebration, a month of study of Christmas customs just anywhere and everywhere, a month of study of the life of Washington for February 22, a month of study of Easter customs, a month of study of the Civil War for Decoration Day—all interposed between the European topics outlined for the grade. One can picture the result; certainly there would be nothing left of continuity. Might not a better plan be to draw from the history course itself a contribution to the holiday, if possible? Take the Sixth Grade again as an example—at Thanksgiving, the Sixth Grade is probably in the midst of the study of Rome; then a play based upon "how the Romans gave thanks to their gods" would certainly review and reinforce the historical knowledge of Rome already accumulated, and at the same time bring out the idea of an ancient Thanksgiving celebration, that will serve as a contrast to a Colonial Thanksgiving which is a legitimate part of the Seventh Grade work in its study of the American Colonial period. If the Sixth Grade happens to be studying the Middle Ages by the time Christmas has arrived it might well concentrate upon the early celebrations of the new Christian nations, or of our own American customs directly traceable to the early Germans. When it comes to the celebration of Washington's birthday, to which the grade history as attended contributes nothing, the work for this special day might be taken care of by either the literature, English composition or fine arts courses; if literature, it may be to trace out "Washington in literature" finding what the authors of his own time wrote about him, or how the later American writers regard him; if English composition, it may be the writing of an original verse about Washington; if fine arts, it may

be the printing of a poster announcing a "Washington program" to be given by the fifth or the seventh grades since these two grades are right in the study of the historical background of Washington's life.

Thus the history course determines the character of the celebration, the holiday drawing from the history course and reinforcing it.

XVI. The History of Maryland in our Schools. In the third grade which takes up environment studies, the history is arranged as fol'ows: (1) the school community; (2) the county as a whole; (3) the state; (4) the nation. By this plan some concrete stories of Maryland's development are studied in the Third Grade; the Fourth Grade gets a picture of colonial Maryland; the Fifth, of Maryland in the Revolution with some stories of typical incidents and of people of the State who have contributed to national thought and feeling; the Sixth, studies nothing of Maryland history, but takes up a detailed study of Maryland geography which gives the physical setting for Maryland's industries and commerce; the Seventh, studies in an intensive way Maryland's part in Colonial life, in the Revolution, in the "Critical Period," and in the War of 1812, paralleling the history of the State with the Nation's development; the Eighth continues this plan and brings the history down to date. For the Third, Fourth and Fifth grades, a set of Passano, *Maryland, Stories From Her History*, has been placed in each building, and for the seventh and eighth grades a set of Gambrill, *Leading Events of Maryland History*. Selected pages or passages of Gambrill might well be read by the Fifth Grade child.

XVII. Where to Get Information: Bibliographical Aids. Even the most learned specialist must make extensive use of books that tell him where to obtain information about subjects he may be studying. Such aids are indispensable tools for the teacher who makes any pretence of careful preparation, certainly for the busy teacher of the elementary school who has not been especially trained in history and who has to prepare work in other subjects as well. Ordinarily the teacher in the grades will want a selective list and if possible one that critically describes the books mentioned: at other times, in connection with some intensive study or for the preparation of a dramatic exercise, more extended lists may be needed. The following list will indicate some of the more important and useful works; what the teacher uses must depend in large measure upon what is accessible as well as upon what might be most useful in a given case. Always note carefully the publication

date, since a volume five or ten years old will of course omit the titles of recent works which may be of special value.

Andrews, Gambrill, and Tall: A Bibliography of History for Schools. 224 pp. 1910. Longmans, Green & Co., 60 cents.

Covers all fields, from ancient to modern. Gives critical appraisals of a selected list of titles, and tells publisher and price. Contains lists of historical books for children.

Channing, Hart, and Turner: Guide to the Study and Reading of American History. 1912. 650 pp. Ginn & Co., $2.00.

Topical summaries followed by extensive, classified bibliographies, fully indexed. Also many short articles and much miscellaneous information of value.

Root and Ames: Syllabus of American Colonial History. 1912. 123 pp. Longmans, Green & Co., 90 cents.

Begins with "European Backgrounds" and extends to 1787. Topical outlines that are valuable because of the inclusion of social, economic, and intellectual phases and presentation of the views of leading specialists in the field; each topic accompanied by a few carefully selected references.

The American Nation. Edited by A. B. Hart, 27 vol. 1904–07. Harper.

Each volume contains a bibliographical chapter at the end, giving the chief authorities and sources, with a critical estimate of the value of each.

Historical narratives of recent date, written by sound scholars, usually have selected bibliographies by chapters, often with comments on the value of the works mentioned. The following are useful:

Bassett, Short History of the United States. 1913. Macmillian. $2.50.

Riverside History of the United States. Edited by W. E. Dodd. 4 vol. 1915. Houghton Mifflin Co. $1.25 per vol.

Channing, History of the U. S. (Macmillan) is a large work, to be completed in about 12 vol.. 3 being now (1915) published.

Illustrated Topics for Ancient History and for American History are published in leaflet form (at 2 cents) by the McKinley Publishing Co. of Philadelphia; they give outlines, extracts from sources, and some references but a number to textbooks.

A History Syllabus for Secondary Schools. Prepared by a committee of the New England History Teachers Association. 1904. Heath. Gives outlines for ancient, medieval, and modern Europe and the United States, with topical references and selected library lists.

Historical Sources in Schools. By a committee of the New England History Association. 1902. Macmillan. 50 cents.

Annotated lists of the most convenient source material for use in schools, but a large amount of important material has been published since this volume appeared.

Year-book of the Maryland State Department of Education for 1912, pp. 74–92, gives a chapter especially prepared by a committee of the Maryland History Teachers Association for the assistance of grade teachers; it provides a brief, carefully selected list of books with critical descriptions and estimates.

For the wide range of topics covered by the course for the Sixth Grade material will be found in several of the books in the foregoing list as will appear from the annotations. For others see the special reference lists for the grade.

Periodicals: The *American Historical Review* is edited by a committee of distinguished scholars representing the American Historical Association; published quarterly, it provides critical reviews of the newest books in the field of history. The *History Teachers Magazine* appearing monthly, prints classified lists of new books, and brief reviews. Various standard magazines devoted to more general fields (e.g., the Review of Reviews, the Literary Digest, the Independent, the Outlook, the Book Review of the Sunday edition of the New York Times) give book notes of value.

The Cumulative Index and Poole's Index open the door to the files of magazines in the public libraries. Very recent history sometimes cannot be studied from books at all.

XVIII. Plan of the Course of Study. The old course of study has seemed open to objection on the ground that it violates the principle of continuity or orderly evolution, in some cases failing to make a well-connected story within a grade and in others between the grades. The experience of the teachers pointed the way to other possible improvements, and the work of several years in the Institute under Prof. J. M. Gambrill has aided in the plan for a critical and constructive revision. A practical difficulty in carrying out the old course arose from the lack of suitable textbooks for some grades where the selection of topics was unusual.

It has been decided, after consulting with specialists, that under all the circumstances it is wiser to make the Report of the Committee of Eight of the American Historical Association the basis of the present course. The following estimate is quoted or summarized from the only comprehensive appraisal that has been published; it appeared in full in the History Teacher's Magazine for February, 1912, and is the report of an address at the meeting of the American Historical Association at Buffalo in December, 1911, by Prof. J. Montgomery Gambrill of the department of history, Teachers College, Columbia University.

SHALL THE COURSE OF STUDY RECOMMENDED BY THE COMMITTEE OF EIGHT BE ADOPTED IN THE ELEMENTARY SCHOOLS?

"The material of the course may readily be grouped into three units: (1) Primary work, for grades one to three, devoted to anniversaries, Indian life, and sixteen 'heroes of other times;' (2) Intermediate work, grades four and five, devoted to 'historical scenes and persons in American history;' (3) Grammar-grade work, grades six to eight, devoted to American history preceded by 'those features of ancient and medieval life which explain important elements of our civilization, or which show how the movement for discovery and colonization originated,' and accompanied by some attention to contemporary Europe. The Committee was very much alert to the danger of anything 'ideal' or 'visionary.' . . . . In fact, the one feature of the course which, considered by itself, can be called radical, is the material outlined for the sixth grade.

"We can best appraise the Committee's work by considering the three units in inverse order. The plan of focusing the course around American history is fundamentally sound. Many of the aims of history teaching can be realized from almost any phase or period of the subject; but the great central aim of our history teaching is now recognized as social, the developing of an understanding of the organized society of which the pupil is a part, and the ability and disposition to perform intelligently and honestly his duties as a citizen. For this reason the history work of pupils of every country should culminate in the history of their own nation. But the conception of national history must never be narrow, lest it result in the fostering of the provincial narrowness and vicious chauvinism which have been all too common in our own country. This principle applies with special force to American history, since its institutions in their origin are European, and the roots of our civilization are in other lands. The Committee has explicitly recognized the necessity for making American history the crowning feature of the work, and for using that term in a very broad and liberal sense. While reserving the right to differ on points of detail, we may say, therefore, that this feature of the Committee's work is deserving of very high praise.

"The material prescribed for the intermediate grades cannot be so readily approved. In devoting the entire fourth and fifth years to stories from American history,

the Committee flagrantly violates its own principle, repeated and emphasized (pp. xiii and 125) that each topic should be presented but once, 'fully and finally.' Without subscribing fully to this principle, one may easily disagree as to the advisability of devoting these two years to American history. Children of this age may be keenly interested in Greek, Roman, and medieval stories that give some conception of these civilizations and make familiar some of the great names in their history. These subjects might well lead up to a simple view of the more romantic aspects of the period of discovery and colonization in America. Time might thus be gained in the sixth grade for a more detailed and intensive study of Europe during the period of exploration and discovery in America, and thereby bring the entire colonial period within the sixth grade, giving time for more extended study to the later periods of American history and to important European topics. This sort of work has been successfully tested in various schools. . . .

[But the Committee also had to consider] "the practicability of getting the course adopted by school authorities and efficiently carried out under existing school conditions. . . . Large numbers of pupils leave school every year, notwithstanding our compulsory laws; the figures regarding this elimination differ materially, but it is conservative to say that only one-third of those entering survive for the high school, and only one-tenth complete its work. Mr. Leonard Ayres, who has made wide investigations in this field, states that the general tendency is toward keeping nearly all the pupils to the end of the fifth year, and one-half to the end of the eighth. . . .

"There is no such thing as a standard course of study for elementary schools, either in theory or in practice, not even an arbitrary one, such as the college entrance requirements for the high school.

"The Committee may easily and properly have been influenced by all these factors in the case. In regard to the intermediate work, for example, they may have felt that it is of great importance for the children leaving school at the end of the fifth or sixth grade to have made at least a slight study of the history of their own country. Whether they believed this or not, they may have realized that a large number of superintendents would entertain such an opinion. They may have felt that a course superior from an educational point of view would present too many and too great difficulties for the main body of teachers as they are. They may have felt that it would be hopeless to expect superintendents and boards of education to adopt a course which on the whole represented too wide a departure from the common. Some of us may disagree with them on these points, we may feel that they have been too conservative, but at least we can understand their problem and respect their deliberately formed judgment. . .

"Admitting, then, all that may legitimately or reasonably be said against the Committee's course, there would still be no sufficient reason for withholding our indorsement. If the Committee's work was so palpably bad that a very large percentage of competent judges disapproved its essential features the case would be different; but no such contention can be maintained, and if we wait for a general agreement on all the details of a course, the assistance we desire to give the elementary schools will never be rendered. Almost everybody admits that the Committee's course possesses many sterling merits. It presents for the first time in this country, a complete and co-ordinated course of study in history for the elementary schools, and is the product of four years of intelligent and presumably painstaking study by a committee of eight competent scholars and educators. There is no obligation upon anyone who accepts the essential ideas of the course to follow the exact selection of topics and organization of material prescribed by the Committee. (Such is the Committee's own statement.) Let these be improved upon wherever teachers and supervisors are competent to improve upon them. After ten or twelve years of experience we can have a careful and thorough revision of the Report of the Committee of Eight, just as we have had of the Report of the Committee of Seven. In the meantime, here is a standard for the great body of elementary schools to follow.

"Shall we miss the opportunity that is presented merely because we do not agree that the Committee of Eight course is wholly satisfactory? With the utter lack of any accepted standards or uniformity of practice with the great body of teachers untrained for this special field, with the supervisory officials unprepared to grapple with the problem, would it not be folly to neglect the opportunity to supply authorita-

tively what is needed? Let us by all means bend every effort to secure the wide adoption of the course and to convince superintendents that this much history work at least should be offered, and can be offered, under present conditions in the elementary schools."

It must be emphasized however that we have not adopted *in toto* the course outlined by the Committee of Eight; we have simply made it the *basis* for distributing the work through the grades. In the grammar grades the principal change occurs in the last two years: the Committee of Eight makes the dividing point between the Seventh and Eighth Grades the year 1783 in American history; we make it approximately 1820. The advantages of the modification are that we thus get in the Seventh Grade the whole story of the planting, independence, and firm establishment of an American nation; we leave more time in the Eighth for the fuller study of the recent history, conforming to a strong tendency of the time; and we provide for those pupils who, under the plan of grading in Maryland counties, do not take the Eighth Grade work, but enter the High School at the end of the Seventh Grade, a course which at least introduces them to some of the important tendencies and problems in the history of their country. The teacher should carefully examine the divisions of the whole course, including that for primary grades, and compare with the Report of the Committee of Eight [Scribner, 50 cents]; such a comparison will disclose the particulars in which the latter has been modified for use in Baltimore county. Let the teacher work critically with this course, so that her studies and classroom experience may form the basis for the revision of the future.

Very properly the Committee of Eight declares that it does not expect rigid adherence to detail in carrying out its course. Much of the Committee's work is not well organized to show relations and interpret events, and in this respect, particularly, there is opportunity for the makers of courses of study and textbooks to contribute improvements that may be of service for a future revision. In preparing the County course, we have used the broad outlines of the Committee of Eight and made a fresh arrangement of material within the larger divisions.

XIX. The Topical Outlines. The topical outlines for the grades are primarily for *the teacher*. An outline for students should not give summaries of information, generalized conclusions, and explanations of events; for such material the pupil should make his own outlines, *after* the necessary study and class exercises. If outlines are furnished to the student by the teacher, they should simply indicate the broader organization and set the problems of

the work, the student supplying the rest. A statement of cause or effect, a good generalization, can be memorized as mechanically as a date or a name, and the result is even more nearly useless. For the character of the outline for the Fifth Grade, see special note at the beginning of the outline.

The outlines are intended especially to provide a topical organization of the material of the grade, the topics being selected with a view to indicating significance and relations with the greatest clearness possible. It is seldom that a grade teacher has enjoyed the opportunity of anything like adequate preparation in this difficult field, and it seems wise to provide outlines that will do more than merely state in simple form the main topics for the children to study. More material is provided under some topics than it will be possible to teach to the grade, but the teacher will do more accurate and stimulating work by having it all in mind. If some things that are unfamiliar appear, the topic at least serves to direct the teacher to the problem, while the references indicate sources of information.

At the same time it has been the general plan to introduce to a great extent a form of topic that can be used by the pupil, concrete and simply descriptive of a line of change or development. Many hints regarding presentation are introduced. It should also be remembered that one can be both scholarly and simple. Scholarship does not mean ponderous words and hard phrases; it simply means in a wide sense, truthfulness. The Committee of Eight well says: "Let it be borne in mind that whilst the arrangement of subject matter should be thoroughly scholarly, its handling may be of the simplest; the presentation of each larger topic is to be free of all technicalities of language and thought."

In conclusion, it cannot be insisted too strongly that no teacher can do good work by confining her study and preparation to the work of her grade, and still less by preparing on only one topic at a time. Generally true as this is of all work, it is especially true in history, where few details have much significance or value for us if considered by themselves alone. The Seventh Grade teacher needs to know as well as possible the European beginnings of America, the heritage from the mother land; the Eighth Grade teacher cannot possibly do the work of the grade well without a good knowledge of what precedes it. All is part of the same story. The teacher of every grade should aim to know as well as she can the story of America and its relation to Europe. With so much else to prepare for,

this will take time, but it is essential to good work and should be an end kept in mind.

REFERENCE BOOKS ON TEACHING METHODS: Johnson, *The Teaching of History*, Macmillan Co.; Strayer, *A Brief Course in the Teaching Process*, Macmillan Co.; McMurry, *How to Study*, Houghton, Mifflin Co.; Stevens, *The Question as a Measure of Efficiency in Instruction*, Teachers College Publications; Earhart, *Types of Teaching*, Houghton, Mifflin Co.; Bourne, *The Teaching of History and Civics*, Longmans; Mace, *Method in History*, Ginn & Co.; Wayland, *How to Teach American History*, Macmillan; Hartwell *The Teaching of History*, Houghton Mifflin.

FIFTH GRADE

The work of the Fourth and Fifth Grades should present one continuous story. The first part tells of the discoverers, explorers, and colonizers of North America and ends with the struggle between England and France for control of the continent that closed with the French and Indian War. The last part of the story, that for the fifth grade, begins with an account of life in the colonies just previous to the Revolutionary War, tells of the quarrel that brought on the War, and through concrete and interesting examples, shows how the colonial Americans became a nation, and how through its significant people and its significant events, the nation has grown to its present size, importance, and ideals.

The teacher of the Fourth Grade should be familiar with the part of the story to be studied in the Fifth Grade and should realize that her work should contribute to an understanding of the later events. The Fifth Grade teacher will be constantly referring back to colonial ways of living and thinking, and therefore she, too, must know the story intimately from beginning to end. A careful study of the outlines for the Seventh and Eighth Grades will prove of valuable assistance to the teacher's organization of her own study of the subject. Remember that any kind of history can be taught to children if we only know how to teach it; the difficulty is not in the subject itself but in adapting the material to the child.

Read carefully and critically the "Teaching of History in the Grammar Grades: Some Suggestions," pp. 473–500.

The following outline is not strictly an outline. Because the work is entirely new this year it seems wise to include some interesting incidents not usually found in convenient places, some source material and some suggestions for method, in order that the teachers may be helped while they are preparing their own outlines. We will follow the same co-operative plan we have followed in the past: whenever a teacher hands in an outline plan that she has found to work successfully in classroom and that she thinks will help other teachers, the plan will be mimeographed and given to all the teachers

of the grade. It is not expected that any teacher will teach all the material in this outline; but she should understand everything in the outline, since she is to make a choice of topics. We have endeavored to include only important and significant data. The main headings are planned to outline a continuous story. The outline is as follows:

I. How the Americans lived on the eve of the Revolution.
II. Why the American colonists quarreled with their Mother Country.
III. The rebellious colonies form a Congress and declare themselves independent of England.
IV. The War for Independence and how it was won.
V. The new nation goes into business for itself.
VI. Doubling the size of the country: The Louisiana Territory.
VII The War of 1812: The United States fights for the freedom of the seas.
VIII. Coming to the Age of Machinery.
IX. Life in the different sections of the republic: an industrial and a social contrast.
X. The republic expands to the Pacific.
XI. The North and South quarrel over the extension of slavery to the territories.
XII. One nation or two?
XIII. The progress of the Age of Machinery.
XIV. The United States gains "over sea" possessions.

I. How the Americans lived on the eve of the Revolution:

In New England; in the Middle Colonies; in the South.

How the colonial American spent his day; what his house looked like; what he ate; how his house was furnished; what kind of a school he attended; how he played; how he worked; how he got his letters and news; how he travelled; how he was governed; what he thought of the Old World and of England the home of his fathers. (Mainly a review topic.) On the frontier, the "back country."

The Scotch-Irish and the Germans. Conrad Weiser will make an interesting story of the Indian interpreter who played an important part in frontier affairs at the time of the French and Indian War. (For material for this topic see Bolton, *Scotch-Irish Pioneers* (Bacon and Brown); Faust, *The German Element in the United States* (Houghton, Mifflin); Weiser, *Conrad Weiser;* Walton, *Conrad Weiser.*

II. Why the American colonists quarreled with their Mother Country:

The Revolutionary War followed fast upon the French and Indian War. Three thousand miles away from the mother country, with the ocean between, the Colonial Americans had built up a life quite different from that in Old England. England did not understand this and though the colonist wanted to be loyal to his King and to his old home, he had an intense love and devotion to his new province and "a local patriotism that was more real than any other feeling he had ever had for England."

In England the colonial was considered of very little importance, and when he was thought of at all he was regarded as quarrelsome, disobedient and unloyal, and seldom as an equal.

Great Britain was a great manufacturing and trading country. The colonists did very little manufacturing, and what they did was expressly forbidden by the Mother Country. They had built up a triangular trade with Africa and the West Indies: the sugar and molasses of the West Indies was changed into rum in New England and taken to Africa for the purchase of slaves, which in turn were taken to the West Indies and the South and sold for cotton, sugar, and molasses. This trade Great Britain tried to regulate so as to force the colonists to buy only from British sugar islands, which would make the price ruinously high. Her interference led to smuggling on the part of many of the leading colonists, and out of smuggling grew the first signs of the long and serious war which was to follow. John Hancock, one of Boston's rich merchants, was called in England the "Prince of the Smugglers;" later a price was put upon his head, and upon that of Samuel Adams, the agitator and leader of the "Boston Tea Party."

All of this material must be thought out selectively with the fifth grade child in mind and must be made as simple and interesting as possible. Stories of typical men and incidents of the time will form the best basis for the work to be accomplished.

1. *Patrick Henry:*

The story of Patrick Henry, the Virginia orator and agitator, one of the first and most ardent advocates of independence, should show the Virginia feeling against the Stamp Act, will help to make real the "Old Capitol" at Williamsburg (called by Virginians the "Heart of the Revolution") the First Continental Congress, and the Revolutionary Convention of Virginia.

The King's people in Virginia Stamp Act times were called "Old Field Nags;" and Henry's people, the "High-blooded Colts;" the latter "were in the main young men, poor, pushing and perhaps impatient of the parliamentary restraints put upon them by custom, for the House of Burgesses was organized with all the stereotyped regal formalities."

A picture of the "Old Capitol," at Williamsburg where he made his famous speech should be shown the class. George Wythe was there and Thomas Jefferson, still a student, watched proceedings from the lobby. Jefferson said: "I attended the debate at the door of the lobby of the House of Burgesses and heard the splendid display of Mr. Henry's talents as a popular orator. They were great indeed; such as I have never heard from any other man. He appeared to me to speak as Homer wrote."

(For interesting incidents of Henry's life see Morgan, *Patrick Henry*, Lippincott. Stories for children will be found in Gordy, *Stories of Later American History;* Southworth, *Builders of our Country*, Bk. II.)

2. *Samuel Adams:*

This story will bring out some New England customs, the town meeting, taxes, etc.; what a "penman" could do for the people; what the "Committees of Correspondence," which Adams organized, were: what a "mob-leader" did; the part he played in the "Boston Tea Party;" how far-reaching his influence was on public opinion.

A rhyme written by General Gage at this time expresses his feeling:

"And as for their king, John Hancock,
And Adams, if they're taken
Their heads for signs shall hang up high
Upon the hill called Beacon."

3. *Benjamin Franklin:*

In the fourth grade Franklin stood out as a successful and useful citizen of Philadelphia and one of the first modern Americans—an inventor, a traveler, a philanthropist, a scientist. He now takes his place as one of the foremost American leaders and men of affairs. He is in England as Colonial agent for Pennsylvania and Massachusetts when the Stamp Act is being discussed; his examination by Parliament and his reply to the prime minister probably led to the repeal of the Stamp Act. He returned to America, became a member of Congress, served as agent to Canada to adjust matters after Arnold's campaign, was appointed a member of the commission to draw up the Declaration, etc For the details of his life see his *Autobiography*, and Ford, *The Many-Sided Franklin*.

4. *The Battle of Lexington and Concord, April 19, 1775: "The shot heard round the World."*

It is difficult to make such a battle real in a modern classroom, but illustrations will help. The effect of the news throughout the colonies can best be conveyed to the fifth grade child by the thrilling story of the "express" riders who relayed the news from Lexington to South Carolina. "Through rain, sun, and star light these nameless riders and their brave horses pushed on. Surely they deserve a page in history." The following schedule gives the idea:

April 19, 1775—The Battle.

April 20, 1775—General Putnam at Pomfret, Connecticut, got the news.

April 21, 1775—Arnold at New Haven got it.

And so on.

Each rider carried his letter to a member of the "Committee of Safety" for the town into which he rode; the "Committeeman" signed the letter, writing another to accompany it if there was time, and sent out a fresh rider if the other was exhausted; so it went.

New York got the "express" Sunday, 23, at noon; it was signed by New Haven, Fairfield, Norwalk, Stamford, and Greenwich.

Elizabeth got it in the evening, the 25th; Woodbridge got it at 10 o'clock that night; New Brunswick, at midnight; Princeton 3½ hours later; Trenton at 6 a. m.; Philadelphia at noon sent the news on to Chester; Newcastle got it at 9 p. m.; Elkton, in Maryland, at 4 a. m., April 21, Baltimore, at 10 p. m.; at Annapolis (Charles Carroll of Carrollton, Tilghman, and others signed the paper). On went the riders to Alexandria, to Dumfries, to Fredericksburg, to Williamsburg, to Smithfield (May 3,) to Edenton, to New Berne (May 6), to Washington, North Carolina, to Georgetown, and at last to Charlestown, South Carolina.

"What a ride and for what a cause!"

REFERENCES: Bolton, *The Private Soldier Under Washington* (Scribner), pp. 16–18; Bancroft, *History of the United States*, Vol. 4, p. 167; Sparks, *Men Who Made the Nation*, pp. 106–107.

III. The rebellious colonies form a congress and declare themselves independent of England.

1. *The Second Continental Congress and the Declaration of Independence.*

Localize the Declaration of Independence by our Fourth of July celebrations today.

Samuel Adams, Patrick Henry, Benjamin Franklin, Robert Morris, Thomas Jefferson, were all members of this Congress. Make clear that at the opening of the Con-

gress many of the delegates, Washington and Franklin among them, did not believe in separating from the Mother Country. In June, 1775, while on his way to Cambridge, Washington promised the assembly of New York to do all that he could to bring about peace and harmony with England. "Six months later he raised the Continental flag in front of his headquarters at Cambridge and in a few weeks more he was openly advocating independence."

On July 4th, independence was declared, on July 8th the Declaration was read to the people of Philadelphia gathered in State House Square. Its commemoration began even the next year; "Thomas Burke, writing from Philadelphia, July 5, 1777, notes the celebration at that city on the preceding day, at which 'a Hessian band of music which were taken at Princeton performed very delightfully, the pleasure being not a little heightened by the reflection that they were hired by the British Court for purposes very different from those to which applied.'"

For the pictures and short sketches of the signers of the Declaration see Century Historical Reader: *The Colonists and the Revolution*, pp. 157–179. Maryland's signers were William Paca, Samuel Chase, Thomas Stone, Charles Carroll of Carrollton.

2. *George Washington—Elected Commander in Chief of the American Army:*

The fourth grade work has shown Washington as a fearless young Virginian answering the call of duty as a messenger of the Virginia Assembly to the French on French River, and later as General Braddock's aide in the French and Indian War.

Now Congress chooses him to take charge of its army believing that he, above all others, will guide the country safely through the struggle. Modestly Washington said: "Since the Congress desire, I will enter upon the momentous duty, and exert every power I possess in your service and for the support of the glorious cause. But I beg it may be remembered by every gentleman in this room that I this day, declare with the utmost sincerity, I do not think myself equal to the command I am honored with."

On July 14th, Nathaniel Greene of Rhode Island wrote from Boston—"His Excellency General Washington has arrived amongst us, universally admired. Joy was visible in every countenance and it seemed as if the spirit of conquest breathed through the army. I hope we shall be taught to copy his example, and to prefer the love of liberty to all the pleasures of domestic life."

Give a clear picture of the camp in Cambridge, and Washington's headquarters (the house afterwards owned and occupied by Henry Wadsworth Longfellow); make the class see the troops from the various colonies arriving day after day, while pleasure parties of townspeople come out to see the great army in the making. Nathaniel Greene said "If they saw Washington, they would say 'That is his excellency,' 'That is General Washington,' remarking about his blue coat, with buff colored facings, the rich epaulette on each shoulder, the buff underdress, the elegant small sword, and the black cockade in his hat" (Greene: Life of Nathaniel Greene).

There is a place here for describing Washington's camp chest for it traveled with Washington everywhere during the war. Show a picture of it (one can be found in Lossing's *Pictorial Field Book of the Revolution*, Vol. II, p. 200)—"An old fashioned hair trunk, 21 in. long, 15 in. wide, 10 in. deep, filled with table furniture used by him during the Revolution. It contains a coffee and tea-pot; 3 saucepans; 5 glass flasks for honey, salt, coffee, port wine, and vinegar; 3 large tin meat dishes; 16 plates; 3 knives and 5 forks; 5 small bottles for pepper and other materials for making soup; tin boxes for tea and sugar; and a candlestick and tinderbox."

(See also the booklet sold by the Mount Vernon Memorial Association.)

IV. The War for Independence and how it was won:

1. *The rank and file in the army under Washington:*

This story will bring out the difficulties Washington encountered in his task of making an army for the United States out of the independent little bands sent by the different colonies; what a day in camp meant; what trenches were like then; difficulty of getting food supplies; enlistments; providing their own guns; suffering from want of fuel; home-sickness; dissatisfaction; smallpox in camp; hospitals; picket duty; serving in the "grass guard" to watch the horses while feeding; repairing huts; cutting roads; tramping roads through brush; constructing earth-works; making cartridges; how disobedient soldiers were punished, etc. "Peter Young for being drunk, was sentenced to ride the wooden horse for fifteen minutes, with two guns tied at his feet, and ten minutes without guns, as an adequate punishment for his crime." "He who fell asleep while on duty was punished by twenty lashes on the bare back, or more if the enemy was near enough to make the crime a dangerous one." "A penalty that afforded real amusement was given one Bowen—'sentenced to wear a clogg chained at his leg three days,' or in that to Griffith, guilty of selling Major Carne's cordage, 'to wear a clog four days with his coat turn'd wrong side outwards.'"

Probably the most interesting information on this topic can be found in Bolton, *The Private Soldier under Washington*, (Scribner.)

2. *In the northern campaign with Washington:*

Still with the rank and file the class can follow Washington through Long Island; in New York anxiously watching and working to keep the colonies from being "cut in two;" around Philadelphia with the terrible winter at Valley Forge; watching the whipping into shape that Baron von Steuben (a soldier trained under Frederick the Great) gave the army; taking part in the Christmas night capture of the Hessian soldiers at Trenton; and finally, hearing the glad news of Burgoyne's defeat at the decisive battle of Saratoga.

3. *The part women played in the war:*

The winter at Valley Forge offers good material as a point of departure for the part the women played in the war. Martha Washington and Mrs. Greene were both in the habit of spending winters in camp with their husbands and they did much to relieve and comfort the poorly-clad and suffering soldiers. Mrs. Reed of Philadelphia; and Mrs. Lee, wife of the Governor of Maryland, were women who led in public movements in their respective cities to help the cause of independence. (See "Woman's Work for Soldiers" in Hart, *Contemporaries*, Vol. II, pp. 467–469; and Ellet, *Women of the American Revolution*.)

4. *Making a flag for the New Union:*

This seems to be the place for a story of the American flag. General Washington felt the need for a flag for his camp at Cambridge. There were thirteen different flags, even more, from the thirteen different colonies, all waving in the breeze of the Massachusetts camp. The story of how Benjamin Franklin's Congressional Committee proposed a flag for Washington called the "flag of the United Colonies of America;" its description; its first use before the camp at Cambridge; and the adoption in 1777 of the "flag of the thirteen United States" (the story connected with Betsy Ross); is well told in one of the Century Historical Readers: *Colonists and Revolution*, p. 225–230. Another book, *The American Flag*, valuable because of its colored illustrations and its history of the flag, together with a collection of patriotic poems, was compiled and edited by Harlan Hoyt Horner for the New York State Educational Department, 1910.

If the teacher chooses she can bring the story down to date or wait until after the events of 1820 before taking up the thread again. She will need to have the following data: The flag of 1795, fifteen stripes and fifteen stars, was carried in the war of 1812, and was the particular form used in the flag that floated over Fort McHenry when Francis Scott Key wrote our stirring natonal anthem, "The Star Spangled Banner;" then came the flag of 1818; and then the law that after July 4, 1819, there should be thirteen stripes and a star for each state then in the Union, stars to be added as each new state was admitted (this to take effect the fourth of July next following its admission). This is the flag we now use.

5. *Nathan Hale, the martyr spy:*

This story will bring out one type of patriotism that war demands. Because it is very difficult for the teacher to secure the most accurate and up-to-date details upon such a topic, the following data have been culled from a recent Yale University Study: Johnson, *Nathan Hale, 1776*, to be used as the basis for a story of Hale. "His sacrifice is an ideal act of patriotism. With a touching and noble regret that he could do no more, he surrendered in his country's behalf the most that a man can give—his life and his good name. So Nathan Hale becomes endeared to us."

"On the evening of September 22, the regular daily orders from the British Commander-in-chief to his army contained an unusual announcement:

" 'Head Qrs., New York Island, Sept. 22nd, 1776.

'Parole, London. 'Count: Great Britain.

. . . .

'A spy from the enemy (by his own full confession) apprehended last night, was this day executed at 11 o'clock in front of the Artillery Park.' "

The spy was Captain Nathan Hale.

The word reached the American lines that same evening. Captain John Montressor, an engineer in the British army and aide to Sir William Howe, approached the American outposts at old Harlem Lane bearing a letter to General Washington respecting the exchange of prisoners. Montressor, in telling the news about the great fire that had just destroyed the lower portion of the city said some Americans whom the British believed had set the town on fire were immediately caught and thrown into the flames; and he further stated that an American officer, Captain Hale, had been executed in their camp that morning as a spy. Two days later Washington sent his aide, Lieutenant-Colonel Tilghman, of Maryland, to General Howe's lines to discuss further the exchange of prisoners. With Tilghman went Captain William Hull, a dear friend of Nathan Hale, who has written the account of Hale's death just as Engineer Montressor repeated it again to them.

The story of Washington's anxiety after the Battle of Long Island which left New York practically at the mercy of the British army and threatened "to divide the colonies in two," the critical situation, and Washington's ignorance of what was going on behind the works and the camps across the East River—all can be so vividly portrayed as to make Hale's decision to attempt to get this information a *crowning climax*. It will bring out how the secret service of the army was managed; what a picked body such as Knowlton's Rangers, to which Hale belonged, meant; and how carefully Hale thought through the whole matter before he decided to undertake the mission. He said to his friend, Captain Wm. Hull, who begged him not to undertake the mission: "I am fully sensible of the consequences of discovery and capture in such a situation. But for a year I have been attached to the army, and have not rendered any material service, while receiving a *compensation* for which I make no return. Yet I am not influenced by the expectation of promotion, or pecuniary re-

ward; I wish to be useful, and every kind of service necessary to the public good, becomes honorable by being necessary. If the exigencies of my country demand a peculiar service, its claims to perform that service are imperious. . . . . I will reflect, and do nothing but what duty demands." After he had decided to undertake the mission, he made his plans, and "disguised as a Dutch schoolmaster, in a plain suit of citizen's brown clothes, with a round, broad brimmed hat, shoes without buckles, and with nothing but his college diploma," he started to explore the enemy's lines on Long Island. The story of the ten days is lost in mystery; but the story of the capture has often been told as well as of the cruel treatment Hale probably received from the notorious Provost-Marshall Cunningham after the death sentence was pronounced. "We can picture the ladder, the hangman, the grave at his feet, we can see him face it all heroically," and we can hear him say, "I only regret that I have but one life to give for my country."

A few of Hale's letters, and some of his poems will find ready interest if read to the class. Incidentally much information can be gained by the teacher herself from reading this biography carefully; it contains contemporary notices regarding the war that were published in "The New London Gazette," and many letters from Hale's own correspondence.

6. *Fighting with Greene in the South:*

"General Nathaniel Greene was second only to Washington" from the beginning of the war, to the end of his great campaign in the South. Washington said to Congress when he announced Greene's appointment to the command of the Southern army, "I think I am sending you a general."

Col. Pickering said: "I remember that, as I was passing the night at Providence, on my way to New York, with my regiment, in 1776, the conversation turned upon the possibility of Washington's being killed, and who, in case of such misfortune, was best qualified to take his place. Greene, it was acknowledged by all, was the proper man."

He was a Rhode Islander, a splendid business man, and a brilliant soldier, and from the beginning of the war he served with Washington and was his staunch friend. The British spoke of him as a soldier as dangerous as Washington. He put the army on its feet when he was given charge of the commissary at Valley Forge; and though the conditions that confronted him on his arrival at Charlotte in December, 1780, to take command of the army in the South, were probably worse than at Valley Forge and even more discouraging, "with tireless patience he set about changing this shadow of an army into a fighting force." The troops were sadly in need of clothes; "some of the cavalrymen were armed with swords made in blacksmiths' shops and some of the militia had no arms at all. Cooking vessels were almost as scarce as arms; tents were almost unknown; the men held their ragged clothes together with thorns from locust trees, and food was so scarce that Gen. Lighthorse Harry Lee said 'If we leave here, I know not on what we will employ our teeth.' " He moved his men to a more comfortable camp on the Pee Dee River close to Cornwallis' post at Winneboro, South Carolina; and began the famous race with Cornwallis during which *King's Mountain*, *Cowpens*, and *Guilford Courthouse* shattered the British army, and led to its surrender at Yorktown.

Nathaniel Greene ended his days on the estate on the Savannah River that Georgia bestowed upon him. (It was while visiting at Mrs. Nathaniel Greene's home in Georgia after General Greene's death that Eli Whitney invented the cotton gin.) North Carolina and South Carolina were also generous in their gifts of land to him, as an appreciation "of his worth as a man and his greatness as a soldier."

A song the soldiers and the people found popular at the close of the war which was sung to the tune of "Yankee Doodle" contains the following stanza:

"Cornwallis led a country dance,
The like was never seen, sir;
Much retrograde, and much advance,
And all with General Greene, sir.
They rambled up and rambled down,
Joined hands and off they ran, sir;
Our General Greene to old Charlestown,
And the Earl to Wilmington, sir."

For interesting details consult Greene: *Life of Nathaniel Greene.*

7. *General Daniel Morgan and the Battle of Cowpens: the turning point in the war in the South:*

This story should ring out the activities of the Tories in South Carolina which probably had a larger Tory population than any other of the thirteen states. Active under Arnold at Quebec, at Saratoga, and winning for himself renown for his courage and daring, this Virginia farmer (born in New Jersey however) was sent by Washington with "Lighthorse Harry" Lee, Colonel William Washington, von Steuben, Lafayette, Colonel Otho Williams of Maryland and a few other specially picked men, to serve Greene in the Southern campaigns. Morgan's defeat of "Tarleton and his Legions," the famous Tory band of South Carolina, and the capture of nearly all of the band, made Greene, even with his miserable little "shadow of an army," take heart. In the retreat that followed across North Carolina and on into Virginia, Morgan and Greene played a spirited game of "race" with Cornwallis in pursuit. Channing says Morgan deserves to be more widely known. (See Graham: *Life of General Daniel Morgan.*) Lossing in his Pictorial Field Book tells the following story of Morgan and Tarleton:

"In Salisbury one night while the Royal Army rested to take up the pursuit of Greene and Morgan the next day, the British officers were hospitably entertained by Dr. Anthony Newman, though he was a Whig. Dr. Newman's two little sons, in the presence of Colonel Tarleton and others, were engaged in playing the war game of the battle of Cowpens with grains of corn—a red grain for the British officer, a white for the American. Washington and Tarleton were particularly represented, and as one pursued the other, the little fellows shouted as in real battle 'Hurrah for Washington!' 'Tarleton, run!' 'Hurrah for Washington.'

"Tarleton, irritated beyond measure, muttered fiercely, 'See those fierce little rebels.' "

Lossing also tells a story of Lord Cornwallis at the time he was in pursuit of General Greene: "Cornwallis passed near the plantation of the 'Widow Brevard,' and ordered it to be desolated. When asked why he was so cruel toward a poor widow, he replied: 'She has seven sons in the rebel army.' "

8. *Colonel Francis Marion, the "Swamp Fox" of the Pee Dee and Santee Rivers:*

With a ragged regiment "of leather capped men and boys he darted in and out of the marshes falling with lightning swiftness on any careless foes." He became a terror to the British in South Carolina and greatly aided Greene by thus annoying and hounding the enemy.

The story of Marion should form the point of departure for explaining the part guerilla warfare played in the south. In South Carolina where the Tory element was particularly strong and where Cornwallis established a system of imprisoning, hanging and impressing all patriots who remained in the states and devastating their

homes, all who would not take the oath of allegiance to the King fled to the swamps and mountains of the interior, and under Marion, Sumter, Pickens, and Williams kept up the partisan warfare that became so famous.

Otho Williams (of Maryland), in describing the first occasion when he saw Marion's men, said "Their number did not exceed twenty men and boys, some white, some black, and all mounted; but most of them miserably equipped; their appearance was, in fact, so burlesque, that it was with much difficulty the regular soldier was restrained."

Marion was of Huguenot origin (a native of South Carolina), "a small, hardy, taciturn man, acclimated to swamps and fevers, a lover of horses, a hard rider, inspired with all the generosity, chivalry and humanity towards enemies, which was so dear to the Southern heart; and of an intelligence that seemed to fit him for higher military command than he ever attained." (See Fisher: *The Struggle for American Indpendence*, Vol. II, p. 245.) Marion in one of his letters describes the methods and conditions of warfare in South Carolina:

"On September the 4th marched with 53 to attack a body of 200 Tories who intended to surprise me; surprised a party of 45, killed and wounded all but fifteen, who escaped;—met and attacked the main body, and put them to flight, though they had 200 men. . . .Marched to Black Mingo Sept. 24th, where there was a guard of 60 men of the militia:—attacked them on the 28th: killed three, wounded and took 13 prisoners. So many of my men were desirous of seeing their wives and families which have been burnt out; that I found it necessary to retreat the next morning." (Gordon, *American Revolution*, Vol. III, p. 455.)

9. The War on the Sea:

a. The beginning of the navy. "The blockade of Boston, in 1775, made it necessary for the British soldiers and the inhabitants of Boston to secure food, clothing, and military supplies either from Halifax, the other colonies, or from England. Colonel John Glover of Marblehead 'as much at home on sea as on shore' secured a commission from Washington to fit out one or more vessels at the expense of Congress to capture British transports on their way to Boston. Several small fishing schooners, the *Hancock*, *Lee*, *Franklin* and *Warren* were put into service; they were armed with 'swivel guns and four-pounders' and manned with small companies of soldiers. The *Lee* captured the British ship *Nancy* off Cape Ann and brought her into Gloucester Harbor. Two thousand muskets and bayonets, eight thousand fuses, thirty-one tons of musket balls, barrels of gunpowder, and military tools of many descriptions formed the cargo of this 'instance of divine favor' as Washington termed it." (Channing's *History of the U. S.*, Vol. II, pp. 175–176.) This little fleet of Washington's, as it was called, captured about 35 prizes.

b. The Privateersmen and how they worried the British. "More than 2000 American privateers ranged the seas at one time or another during the war. They swarmed in the West Indies; they cruised along the Atlantic coasts; they sought their prey in the British Channel and the North Sea. They actually cruised off the ports of Spain, in plain sight from the shore, capturing British vessels laden with fish from Newfoundland—selling ships and cargo to the Spaniards at much below their value. . . . They added greatly to the expenditure of English, interfered with transport service, and made government and people more willing to acquiesce in 'American Independence.' " (Channing, Vol. II, p. 311.)

For an interesting account of "Life of a privateer and the capture of a British prize," see Hart: *American History Told by Contemporaries*, Vol. II, pp. 497–499.

This can be read to the class or adapted for reading. See also "Timothy Boardman's *Log Book kept on Board the Privateer Oliver Cromwell during a Cruise from New London, Ct., to Charleston, S. C., and Return, in 1778.*" Ruthland County Historical Society, Albany.

c. Vessels owned and commissioned by individual colonies:

The Marine Committee of the war was made up of thirteen members, one for each colony and included such men as Robert Morris, Samuel Chase (Maryland), and John Hancock, a most ardent and patriotic body of men. It had charge of naval affairs until 1779 when a "Board of Admiralty" made up of three commissioners and two members of Congress had charge until 1781. Then Robert Morris was appointed Agent of Marine and he managed most ably until the time the Constitution was adopted.

Perhaps the most vivid and concrete way to present this is to make a story of Maryland waters and the Chesapeake during the war:

"Baltimore fitted out more privateers than any other American city. These vessels were famous for their speed and the skill with which they were handled. . . . It has been claimed with some reason that Baltimore was the most zealous and patriotic city in the country in point of damage inflicted on the enemy." (See Gambrill: *Leading Events of Maryland History*, p. 129.)

Maryland's ship was the *Defence* (1776). The British sloop of war *Otter* began operations to capture small crafts in Chesapeake Bay and destroy the *Defence*, not quite completed, in Baltimore harbor. Captain Nicholson in command of the *Defence*, determined to retake the prizes, and got his ship ready, shipped a number of volunteers, with a portion of Captain Smith's company as marines, and bore down upon the enemy. He was accompanied by several smaller vessels crowded with men. The morning was hazy, and the British were taken completely by surprise. The tenders escaped with difficulty and all the prizes were recaptured, manned, and cleared for action.

"The *Otter*, frightened by the prompt action and formidable appearance of Nicholson's squadron bore away for Annapolis. But finding this place equally well fortified . . . she, with her tenders, dropped down the bay without having won either booty or success." (See McSherry, *History of Maryland*, pp. 155–156.)

In December, 1775, Congress established a Continental navy and the gallant Captain Nicholson received a commission in the new navy and took command of the continental frigate *Virginia*. Capt. William Halleck and Joshua Barny were other Marylanders who entered into the continental service and sailed with Commodore Hopkins from Philadelphia early in 1776 while thousands watched the little fleet of five ships, hoist the stars and stripes as they passed down the river. At the Capes the *Hornet* and *Wasp*, two schooners of Baltimore, joined the fleet which sailed for the West Indies. "This little fleet of eight vessels: *Alfred*, *Columbus*, *Andrea Dorea*, *Cabot*, *Providence*, *Hornet*, *Wasp*, and *Fly* carried 110 guns, and were manned by men without naval discipline. They were to do the work of opposing 78 British men-of-war mounting 2078 guns."

d. The real navy:

"As early as 1776, Congress had authorized the building of three 'line of battle' ships intending to match Great Britain on the sea. Such a long line of coast as ours needed a strong defense. But there was no money to complete the building of those ships; the *America* begun at Portsmouth, New Hampshire, in 1777, in 1781

was still only a hulk; the other two were never begun." She was finished in 1782 and given to France in part payment of our war debt to her. Robert Morris spoke of our navy as the "country's infant and unfortunate navy." In a letter to France in 1776 he tells of some of the difficulties that made it impossible to go on with plans for the navy: the lack of sea-coal, disappointments in efforts to cast cannon, the need for all the possible men on shore. Then he gives a rather full and complete list of ships available for the navy at the time, and which Congress had to content itself with purchasing from time to time. (See Hart: *American History told by Contemporaries*, Vol. II, pp. 556–559.) For an explanation of such naval terms as "ships-of-the-line," "frigate, "sloop of war," used at the close of the 18th century, see "Types of Ships" in *A Short History of the United States Navy* by Clark, Stevens, Alden. Kraft. pp. 44–51. These pages are simply told and can easily be read by the fifth-grade child.

Another interesting book is *The Romance of the American Navy* by Frederick Stanhope Hill (Putnam).

e. The story of John Paul Jones of Virginia:

Appointed head of a list of 13 lieutenants in 1776; in May, 1776, given his first independent command of the brig *Providence* Congress promoted him August, 1776 to full rank of Captain with orders to cruise for prizes along the Atlantic coast; by bold maneuvers he made several close escapes himself and captured sixteen prizes or more; he was given command of the *Alfred* in 1777; June, 1777, he was put in command of a new 18 gun ship *Ranger* the first vessel to fly the Stars and Stripes then recently adopted" and sailed to European waters. "In February, 1778, we find him in Quiberon Bay off the coast of France exchanging salutes with a French ship; the 'first American vessel to exchange salutes with a foreign nation' writes Jones proudly." In April, 1778, he left Brest and sailed to the English coast to set fire to some shipping in Whitehaven harbor and while off the Scotch shore he hoped to take noblemen as hostages to insure the better treatment of our prisoners in England. After a battle of an hour and a quarter off the Irish coast opposite Whitehaven he captured the British ship *Drake*.

Meanwhile France and England had gone to war. Jones tried to get France to give him a command for they could render him great service by so doing. After many efforts and five months of waiting he went himself to the court and finally was given a very old hulk of 40 guns, named the *Duras*. This he rechristened *The Bon Homme Richard"* in honor of Benjamin Franklin's "Poor Richard's Almanac." Four other ships were added to this squadron and fitted out at L'Orient. Jones was able to man his own vessel with 100 American prisoners recently gotten from England. With the help of his first lieutenant, Richard Dale, Jones' ship was able to do good service. With his squadron he sailed up the west coast of Ireland, rounded the Orkneys, intending to destroy shipping at Leith. On Sept. 23, 1780, came the encounter with the Baltic Fleet of 40 merchantmen under convoy of the two British men-of-war, the *Serapis* and *The Countess of Scarborough*. The encounter with the *Serapis*, "the most striking naval victory of the war" is best described in John Paul Jones' own words (See Hart: *American History Told by Contemporaries*, Vol. II, pp. 587–590).

Jones was knighted by France, and was presented a sword by the King. On his return to America, Congress gave him a vote of thanks, and appointed him to command the "America," still "on the ways" at Portsmouth. Later he went to France, then to Russia as vice-admiral, and returned to France where he spent most of the remaining years of his life, honored by the French and an intimate

friend of Lafayette. He died July 18, 1792. Napoleon said of him in 1805 "Had Jones lived to this day, France might have had an admiral." His remains now lie in the crypt of the Naval Academy Chapel in Annapolis, Maryland. (See Hill, *The Romance of the American Navy*, pp. 61–92.)

10. *George Rogers Clark: how he captured the Great Northwest:*

He put a stop to the Indian warfare which the British commanders roused the Indians to wage against the backwoodsmen of the Colonies "and he gained for the country the great stretch of land north of the Ohio and east of the Mississippi."

"At Detroit, Mackinac, Vincennes, Kaskaskia, and Cahokia, were small forts built of logs. These structures had originally been erected by the French fur-traders to protect their stocks of goods and in times of danger served as rallying points. When the English took possession (at the close of the French and Indian War), they were considerably strengthened, and under this remodeling some of them came to be formidable fastnesses in a wilderness where besiegers were chiefly savages without artillery. As a rule, the curtains were guarded at the four corners by solidly built blockhouses, serving as bastions, these houses being generally two stories in height and pierced for rifles and cannon. One or more of the curtains were formed by the rear walls of a row of log-cabins, the others being composed of palisades, great logs standing on end, the bottoms well buried in the ground and the tops sharp-pointed; around the inner edge of these wooden ramparts, the roofs of the cabins formed a gallery, on which crouched those of the defenders who were not already engaged in the blockhouses. The heavy-timbered gate, with its massive forged hinges and bolts, was guarded with particular tenacity. In the event of the enemy forcing this, or making a breach in the curtains by burning or scaling the palisades, the blockhouses were the last towers of refuge, around which the contest was waged to the bitter end.

"At the time of which we are speaking (The Revolutionary time) these frontier forts were generally commanded by British captains, with a few regular officers and privates to form the nucleus of the garrison . . . . Clark was well aware of the condition of affairs north of the Ohio. . . . (He) realized that so long as the Northwest was suffered to remain a safe rallying-point for war-parties, Kentucky would continue to suffer . . . and very likely the settlers be wholly exterminated or at least driven from the field."

The sending of spies to Kaskaskia and Vincennes, Clark's consultation with Patrick Henry, then Governor of Virginia (August, 1777), the aid given by the legislature of Virginia, the secrecy of the undertaking, the collecting of frontiersmen, "many of them Scotch-Irish borderers in home-spun and buckskin," many of them "mean, brutal fellows," many of them thoughtless adventures, the incidents of the journey out to the Kaskaskia,—all are well told in Clark's Journal which is easily available for the teacher. For a convenient and helpful account, see Thwaites: *How George Rogers Clark Won the Northwest*, McClurg Co.

Thwaites says: "The English peace commissioners (1783) at first claimed the Northwest as a part of Canada; but throughout the protracted negotiations Jay and Franklin persisted in demanding the country Clark had so gallantly won and was holding. . . . (Franklin argued) that unless room for growth were given the United States, a permanent peace could not be expected between the two countries—that the tide of emigration westward over the Alleghanies could not be stemmed. . . . Nevertheless, Jay and Franklin could have found no footing for their contention, had Clark not been in actual possession of the country."

11. *Some foreigners who helped the Americans win their freedom:*

Some of them are Kosciusko, the Polish hero; Pulaski, also a Pole; Baron de Kalb; Baron von Steuben of Prussia who proved invaluable in disciplining and organizing Washington's raw troops at Valley Forge, and, most illustrious of all on the roll, Lafayette (Jean Paul Roch Yves Gilbert Motier, Marquis de Lafayette) "who with youthful enthusiasm, left wife and fortune and great social position to serve freely the cause of liberty. No other foreign soldier entered so completely into the spirit of the Americans and viewed with such sympathy all their shortcomings. Lafayette's service in America proved effective in winning American hearts to France as did Franklin's mission in securing for America the friendship of that nation." (Van Tyne: *The American Revolution*, p. 216.)

"Against the King's commands, he ran away, bought a ship to run away in, boarded it in Pasajes, a port of Spain, and with a commission as Major-General in the army of a land three thousand miles away that he had never seen, sailed with eleven chosen companions." April 25, 1777, he landed at the port of Georgetown at the mouth of the great Pee Dee River, South Carolina. At first he found only a cool reception, for foreigners had been coming in by the boatloads and Washington, annoyed and worried about them because Congress was poor and could not pay, was always glad when a shipload of them left again for their native land. "But Lafayette was different from the others, and when Lafayette with his boyish enthusiasm said that he wished to serve in the American army upon 'two very singular conditions, namely; that he should receive no pay, and that he should act as a volunteer,' Congress was so impressed that it gave him the rank of Major-General in the Army of the United States." Washington took him into his "military family" and soon grew very fond of him; indeed a friendship sprang up that lasted all their lives.

Wounded at Brandywine; a general before twenty because of his "bravery and military ardor;" victor at the Battle of Monmouth; one of the court that passed judgment on Andre; back again in France in the winter of 1779–80 to persuade his King to send an army to America (he yielded to Lafayette's wishes and sent "7500 men, comprising some of the best regiments in the French service, and officered by men who were famous, or to become so"); returning with this fleet under Count de Rochambeau, July, 1780; landing in Newport harbor, where the news of the surrender of Charleston to Sir Henry Clinton greeted them:—it is surely an interesting tale. The march southward in Feb. 1781,to capture Arnold then stationed as a British Major-General with 1400 men in Virginia; the chase across Virginia "from one side to another" with Cornwallis; the shutting up of Cornwallis in Yorktown; and the surrender, Oct. 19, 1781, where the "boy" as Cornwallis called him turned the tables upon him, complete the story.

"When Lafayette passed through Baltimore at a ball given in his honor, he appeared sad, and on being questioned by one of the ladies as to the cause, replied, 'I cannot enjoy the gayety of the scene while so many of the poor soldiers are in want of clothes.' 'We will supply them!' was the reply of the fair querist; and next morning the ball-room was transformed into a clothing manufactory. The ladies of the city, old and young, gathered to the task, and much was done to relieve the suffering of the soldiers." (Gambrill: *Leading Events of Maryland History*, p. 130.)

In 1824 General the Marquis de Lafayette returned to this country its honored guest. "His journey through the land was like a triumph. Flowers and decorations brightened his path, cheering people and booming cannon welcomed his approach."

Scudder in his *George Washington*, pp. 203–204, tells the following incident:

"After the surrender of Yorktown and the departure of the French, Washington established his headquarters at Newburgh on the Hudson. There he remained with his army until it was disbanded; and the house in which he lived is carefully preserved and shown as an historical museum.

"There is a pleasant story told of Lafayette's affectionate remembrance of his life there. Just before his death, which occurred in 1834, he gave a dinner party in Paris to the American minister and some friends who had been old associates. Later in the evening, when the hour for supper came, the guests were ushered into a room which was in strange contrast with the elegance of the apartments they had been in. The ceiling was low, with large beams crossing it; there was a small single uncurtained window, and several small doors. It looked more like an old-fashioned Dutch kitchen than a room in a French house. A long, rough table was meagerly set. A dish of meat stood on it, some uncouth-looking pastry, and wine in decanters and bottles, ready to be poured into glasses and camp-mugs. 'Do you know where we are now?' asked Lafayette as his companions looked about puzzled, and as if in a dream. 'Ah! the seven doors and one window! and the silver camp-goblets!' 'We are at Washington's headquarters on the Hudson, fifty years ago!' He had reproduced the room to surprise his friends."

For further details about Lafayette and the war see Charlemagne Tower: *Marquis de LaFayette*, Vol. II; and (for children) Burton: *Lafayette, the Friend of American Liberty*. A.B. Co.

12. *The Surrender of Cornwallis.*

The Yorktown campaign was so intimately connected with the coming of the French troops that those two subjects can conveniently be treated as one. Charlemagne Tower: *Marquis de Lafayette*, Vol. II; H. P. Johnston: *Yorktown Campaign:* and Cornwallis' own account of the capitulation to be found in Hart's *Contemporaries*, Vol. II, pp. 615–619, will give all the material necessary for a complete picture of the event. The teacher may find that Cornwallis' account alone together with the following information from Scudder's *George Washington* presents enough data out of which to make a story:—

"There was great rejoicing in camp at the surrender, which was long remembered. Washington issued orders that the army should give thanks to God: 'Divine service. . . . is to be performed tomorrow in the several brigades and divisions. The Commander-in-chief earnestly recommends that the troops not on duty should universally attend, with that seriousness of deportment and gratitude of heart which the recognition of such reiterated and astonishing interpositions of Providence demand of us.'

"The citizens of Fredericksburg gave a great ball and Washington's mother, whose home was in Fredericksburg, was the guest of honor."

(If more convenient use one of the standard histories of the Revolution—Van Tyne, Fisher, F. V. Greene, Fiske, Channing (Vol. III of his *History of U. S.*)

13. *Maryland's worthy part in the war:*

That Maryland men and women did play a worthy part is a matter of real pride and pleasure to all Marylanders.

Probably the most interesting story to tell is that of Tench Tilghman: Born near Easton, Maryland; graduating at the College of Philadelphia and entering into mercantile life in Philadelphia (a point of contact with Robert Morris and the Willings) · entering the army early in 1775 as a lieutenant in an infantry company;—he

became in August, 1776, one of General Washington's aides and his military secretary, and continued in this office until the close of the war, participating in all the battles of the main army. Wherever Washington was, there was Tilghman.

From the battle-field of Yorktown Washington sent him to carry news of the victory to Congress at Philadelphia. He was to spread the news as he rode through the country. He covered the distance in four days, arousing President McLean at midnight. On October 24, 1781, cannon were fired in Philadelphia in honor of the victory that happened five days before. For this memorable ride Congress recognized Tilghman's service by voting him "a horse properly caparisoned and an elegant sword, in testimony of their high opinion of his merit and ability."

Washington said of him: "Colonel Tilghman has been in every action in which the main army was concerned, and has been a faithful assistant to me for many years, a great part of which time he refused to receive pay."

After the war Tench Tilghman came to Baltimore to establish a branch of the Robert Morris mercantile house; there he died in 1786, still a young man.

It would be interesting to have the class find out where Tilghman's mercantile house was located in Baltimore and where he lived while in the city. A history of Talbot County would supply the full record of his life.

But it may be that some teachers will prefer to select other names from Maryland's honor list and make a story of them. The list includes among others—Col. Otho Williams, Maj. Mordecai Gist, Col. Nathaniel Ramsay, Col. John Eager Howard, Col. John Gunby; Lieut. Joshua Barney and Commodore Nicholson of the navy; and the women who helped relieve suffering and misery. Something will depend upon the locality in which the school is located. Monuments in the neighborhood, memorial tablets, copies of the "*Maryland Gazette*," buildings of Revolutionary times now standing, stories about old residents whose brave deeds have been a subject for fireside discussion ever since the war—all these might become the starting point for beginning the study of the Revolution. They are "remains" and such concrete, definite remains are a teacher's opportunity for "making the past real" to her students.

14. *Paying the war debts: the other side of the war—*

War is an expensive thing and the war debts Congress had to assume should be made clear to even the ten-year old child. This story will give some idea of the coins in use and their value; paper money, its value—"not worth a continental"—and why it declined in value; paying soldiers; borrowing from France, Holland and Spain, etc. The central figure of the money situation was Robert Morris, the Philadelphia banker. The great service he rendered the country is as great as that of the greatest soldier of the time and must be so recognized. Robert Morris will be of peculiar interest to our county children because he began his colonial life as a boy of thirteen in the town of Oxford on the Eastern Shore of Maryland: This small boy from Liverpool crossed the Atlantic in one of the poor ships of the time, to join his father who was an agent in Oxford for a Liverpool tobacco house. Of Oxford we read "no other port on the bay was so busy, and it was not unusual for seven or eight ships to be anchored there at one time, unloading European goods and taking on American cargoes, which were made up for the most part of tobacco. The story of Morris' humble origin; his arrival in Maryland, his education under Rev. Mr. Gordon at Oxford (of whom Robert said when his father reproved him for inattention to his studies "I have learned sir, all that the master could teach me"); his apprenticeship to Robert Greenway, a merchant of Philadelphia and a friend of his father; his clerkship in the mercantile house of Charles and Thomas Willing where

he rose rapidly because of his business ability, one day cornering the market on flour by buying up all that a ship in the Delaware had brought when its Captain told him that prices on flour had advanced in Europe, and by so doing raising the prices in Philadelphia; his father's death and his great sorrow over the loss; his partnership with the Willings, and the rapid rise of "Willing and Morris" as a leading house in Philadelphia and their trading with Europe and the West Indies; the activity of Morris in resenting the Stamp Act; the entrance of both Mr. Willing and Robert Morris to Congress early in the Revolution;—all of these details will bring out Robert Morris' power to meet and cope with financial situations.

Oberholzer in his *Robert Morris, Patriot and Financier* tells the story of Philadelphia's resistance to the Stamp Act:

"On October 5, 1765, the nose of the *Royal Charlotte*, an English merchant vessel, under escort of the *Sardine*, an English man-of-war, appeared around Gloucester point. The ship, which was filled with 'the horrible stamp paper,' had been lying at anchor down the river for seven days. The officers feared to bring her up. It was well understood that the colonists would resist the landing of the paper. When the *Charlotte* finally hove in sight, all the other ships at their wharves, and in midstream displayed their flags at half mast. The bells of the city were tolled. Drums muffled with crape were beaten up and down the city streets by particularly sable negroes. . . . Men closed their shops and offices, and the highways were filled with people who ran hither and thither excitedly. A crowd collected at the State House where, at four o'clock in the afternoon, a meeting was held, to decide what course should be pursued to prevent the execution of the King's tyrannous measures. . . . John Hughes, a well-to-do Philadelphia shop-keeper, had been chosen to receive and sell stamps. . . . A commttee of seven was appointed to visit Hughes. . . . (and ask him) whether or not he proposed to take up his commission and perform the duties of his office (as the King's stamp agent. . . . Robert Morris . . . (was) spokesman of the committee . . . (Morris threatened) that the populace would undoubtedly come to the house and tear it to the ground, stone by stone, if he (meant) to receive the stamps and collect the tax. . . . . was obliged to pledge himself to take no steps to distribute the stamps until the citizens of Pennsylvania and Delaware wished him to perform the duty."

In April, 1776, Robert Morris, was commissioned by Congress to suggest methods and provide ways and means for securing money to carry on the war. This was the beginning of his long service in borrowing, lending and expending money for the business of war. He was one of the signers of the Declaration of Independence who at first "faltered at the thought of a separation from the mother country."

Soon the calls for "needful," as he called it, to carry on the war began to come in "loud, large, and constant." When Washington was ready to make the attack upon Trenton, all Morris could send him from Philadelphia was 410 Spanish dollars, two English crowns, a French half-crown, and 10 1-2 English shillings. "Later when Congress began its extensive emission of incontrovertible paper money, Morris who had ever been opposed to this policy, wrote to Congress in Baltimore: 'It is mortifying for me when I am obliged to tell you disagreeable things, but I am compelled to inform Congress that the Continental currency keeps losing its credit.' " From the first it took two paper dollars to induce a holder to part with one silver dollar; a pair of shoes cost $3 and a hat $12. "Five years later it took 1000 of these paper dollars to buy a silver dollar, and men lit their pipes and the barbers of Philadelphia plastered the walls of their shops with this disgraced and worthless money."

Read in Hart's *Contemporaries*, Vol. II, pp. 601–603, what William Pynchon said in his diary about business life during the War—"So! So! So! members of Congress, whither is your credit going? Down hill, surely; but they will bring it up with a heavy tax."

15. *The Treaty of Peace:*

Peace did not come all at once after Yorktown. After the French fleet left, Washington established his headquarters at Newburgh on the Hudson to wait for news from the American peace envoys that would enable him to disband his army and compel the evacuation of the British from New York.

Boundaries, fishery questions, treatment of American Loyalists, the paying of war debts—all had to be settled. These negotiations dragged on for nearly two years.

"On April 18, 1783, the eighth anniversary of the night when Paul Revere roused the minute men of Lexington to meet the British regulars on the village green, Washington proclaimed hostilities at an end; and by the splendid example of his single-minded patriotism, persuaded men and officers to go to their homes without a farthing in their pockets, confident in the power and good will of the new government to reward them according to their deserts."

The final articles of peace were signed September 3, 1783, the British soldiers got ready to leave America and on November 23rd the last English ship sailed out of New York harbor. Washington was there to see them off.

"A few days later many of his old friends gathered in the long hall at Fraunces' Tavern in Broad Street to say farewell. It was a touching scene. Washington's voice faltered, he said a word or two, they drank a solemn toast; and then Washington said: 'I cannot come to each of you to take my leave, but shall be obliged if each of you will come and take me by the hand.' General Knox stood nearest, and he held out his hand. The tears were in Washington's eyes as he turned to his old comrade and grasped his hand. He drew the strong man to him and . . . kissed him. Not a word could either of them speak. Another general followed and another, each greeted with the same affection; then Washington left the room, passed through the corps of infantry which stood on guard, and walked to Whitehall, followed by the whole company, a silent procession. He entered the barge, turned as the boat pushed off, and waved his hat in silent adieu. The officers returned the salute in the same way and in silence marched back to Fraunces.' "

Probably the most important point to bring out in the "Treaty of Peace" is the boundaries, though a little might be said about the Loyalists. Nathaniel Greene who had fought against them in the South now wanted a lenient policy adopted toward them saying "the country needed population and must stand for difference of opinion." In discussing the boundaries a contemporary map is preferable.

Washington went to Philadelphia; from there to Annapolis where Congress was assembled: there on December 23, 1783, he resigned his commission.

V. The new nation goes into business for itself:

The boundaries of the new republic; with the leading cities and their populations, will connect this topic with Topic IV.

When the maps showing the boundaries after the Treaty of Paris are discussed with the children and copied by them, questions are apt to arise about the country beyond the mountains and what had been going on there while the war was being fought along the coast. "George Rogers Clark and the Northwest" will serve as a discussion point also and the topic will very naturally lead to a story of the life of the backwoodsmen of the time.

1. *Life across the mountains: the backwoodsman of the time:*

NOTE: These early settlers followed the long ranges of the Appalachian Mountains and "settlements grew up by salt lick and water course."

a. "The country of Kentucky;" Boonsboro—Daniel Boone.

REFERENCE FOR THE TEACHER: Bruce, *Daniel Boone and the Wilderness Road,* Macmillan Co.

REFERENCE FOR THE CHILD: Montgomery, *The Beginner's American History,* pp. 132–140.

b. In Tennessee: James Robertson; John Sevier and "The State of Franklin."

REFERENCE FOR THE CHILD: Montgomery, *The Beginner's American History,* pp. 140–143.

c. In Mississippi: The importance of the town of New Orleans.

d. In the Great Northwest: George Rogers Clark; Kaskaskia and Vincennes. (A review.)

REFERENCES: Van Tyne, *The Amerian Revolution,* pp. 269–288. (For clear maps and account of the settlements, 1763–1780). Hart: *Contemporaries,* Vol. II, pp. 383–394. (For Boone's own account of his adventures: *"Cold water on an Ohio Colony in* 1770;" *"The settlement of the Western Country,* 1772–1774;" *"How the Frontiers were Settled,* 1780.")

e. The Ohio Company: The town of Marietta and the State of Ohio:

The review of George Rogers Clark and the Great Northwest might well lead on to a simple discussion of the importance of the Northwest Territory, the Ordinance of 1787, and the Ohio Company.

The teacher must keep in mind the importance of the Northwest territory at this time and the common interest of all the states in that region. Maryland's refusal to ratify the Articles of Confederation was because she foresaw the importance of the territory, and declared that Virginia's claims to it (for Virginia laid claim to the Ohio country at the close of the Revolution) was neither just nor wise; Maryland then took the stand that until the other states relinquished their claim to this territory and until Congress took control of it she would not ratify the Articles of Confederation. Fiske says: "Just as it was Massachusetts that took the decisive step in bringing on the Revolutionary War when she threw the tea into Boston Harbor, so it was Maryland that, by leading the way toward the creation of a national domain, laid the corner stone of our Federal Union."

Maryland came into the Union in 1781.

The prominent Marylanders who helped to bring about the passage of the Ordinance of 1787 were Daniel Carroll, William Paca, James Forbes and George Plater.

While Washington was waiting at Newburgh for the terms of the Treaty of Peace to be concluded, some of his prominent officers were planning to establish a military colony in the Ohio territory. One of these was Gen. Rufus Putnam, the "builder of forts" in the Revolution. The matter was placed before Congress which was at the time trying to provide a temporary government for the Territory. The plan of government was published in the "Ordinance." It provided for a governor and three judges who could adopt such laws of the original states as seemed wise and necessary: "So soon as the district should contain 5000 free male inhabitants it could establish a representative assembly; there was to be no following of the law of primogeniture; children of proprietors dying without a will were to receive equal shares of the estates. Slavery also was forbidden. Freedom of worship, morality and education, were to be encouraged."

Rufus Putnam started out from Massachusetts in April, 1788, with surveyors, mechanics and laborers to make the first settlement under the Ordinance. The story is told for children in Montgomery, *"The Beginner's American History,"* pp. 150–156.

"They took with them their energy, their skill, and their love of freedom, and also the religious ideals and thirst for knowledge that was a mark of the times." *They carried no slaves.*

At the same time a certain "John Brown traveling from North Carolina *into Tennessee* by way of the Ohio and Tennessee river carried with him his wife and sons, his household furniture, tools, ammunition, and bales of goods, some books, and *four negro slaves* together valued at $933.33 1-3."

Significant facts are told here that ought to bring out a question about slavery in the two territories.

2. *The Philadelphia Convention, May* 2, 1787*; making the Constitution.*

The calling of the Convention, and the tardy arrival of the delegates from the States can be pictured for the class (the meeting called for May 2nd, many delegates not arriving until May 25th). Washington made a triumphal entry into the city on the 13th. The meeting convened May 25th with Washington as chairman.

The business was secret: and the proceedings were considered "so important that earth was scattered over the pavement of the State House to silence the rattling wheels, and sentries were stationed at the doors to warn intruders that they might not enter to disturb the proceedings."

"*On Sept. 17th,* citizens of Philadelphia who took up their copies of the *Pennsylvania Advertiser* found to their surprise that the columns were completely filled with the new Constitution. This was their first intimation of what the convention had really done"—"Done in convention by the unanimous consent of the States . . . in witness whereof we have hereunto subscribed our names."

Then followed the business of the ratification of the Constitution by the States. It was not done all at once. When New Hampshire and Virginia announced the ratification the following interesting advertisement appeared in one of the Philadelphia papers, the *Pennsylvania Packet,* July 14, 1788:

"SHIP NEWS—EXTRA

"Arrived safe in port, the ship 'Federal Constitution,' *Perpetual Union,* commander. In her came passengers *Flourishing Commerce, Public Faith, Confidence, Justice.*"

3. *The first president: George Washington.*

George Washington on his farm at Mt. Vernon. See Century *Historical Reader: A New Nation,* pp. 3–25.

Going to the convention; his return; elected President; the news carried from New York by Secretary Thomson of the newly organized Senate; how Washington received it: his preparations to travel north; demonstrations on the way especially in Maryland; the arrival in New York; the Inauguration, April 30, 1789; Mrs. Washington's arrival in New York; Washington's reception: how their formality offended many of the democrats; removing Congress to Philadelphia for ten years while a capital was being built.

For interesting anecdotes and information: See Lossing: *Pictorial Field Book of the Revolution,* 2 vols: Lossing: *Home of Washington;* Ford: *The True George Washington.*

4. *Locating the capital:*

"Congress was always on the wing." A comic political poem of the time makes a New York housemaid say to her friend in Philadelphia:

"As for us, my dear Nancy, we're much in a pet,
And hundreds of houses will be to be let;
Our streets, that were just in a way to look clever,
Will now be neglected and nasty as ever;
Again we must fret at the Dutchified gutters
And pebble-stone pavements, that wear out our trotters.
"This Congress unsettled is, sure, a sad thing—
Seven years, my dear Nancy, they've been on the wing;
My master would rather saw timber, or dig
Than see them removing to Conogocheague—
Where the houses and kitchens are yet to be framed,
The trees to be felled and the streets to be named."

Congress decided upon the Potomac River as the location of a permanent capital and Washington chose the site. "He chose that of the present city of Washington, (named for the 'Father of his Country'). A district ten miles square, on both sides of the river, was ceded to the United States by Virginia and Maryland. It was provided that the public buildings should be erected on the Maryland side, and the part ceded by Virginia was afterwards given back to that state. Both Maryland and Virginia appropriated large sums of money to be used for the erection of these buildings. The corner-stone of the capitol was laid by Washington on Sept. 18, 1793, and the seat of government was removed to the new capital in June, 1800." (Gambrill, p. 144.) Mrs. John Quincy Adams (Abigail Adams) describes the National Capital in 1800 in one of the letters to her daughter, Mrs. W. S. Smith (see Hart: *Contemporaries*, Vol. III, pp. 331–333), and tells of the "infamous roads; the unfinished condition of the Capitol itself: the high cost of wood; the necessity for drying the wash in the great audience room;" etc.

Robert Morris was active in promoting the building of the city, buying up lots, and putting up brick houses. He made little if any money on the project.

5. *Establishing public credit:*

Alexander Hamilton and his life on Nevis, one of the islands of the West Indies, will serve to show the important part the West Indies played in the history of the times; his arrival in New York; his early acquaintance with Washington; their friendship; his part in the Revolution; his ability in financial matters early recognized by Morris; his appointment to be Secretary of the Treasury in Washington's Cabinet; his great service in establishing the public credit—all these details can be made of real interest to the child of this grade, if told simply and related to the child's own knowledge of credit at the present time. The class knows from the story of Robert Morris that the country was in debt and in a sorry state financially. The debt to foreigners amounted to nearly $12,000,000; to our own citizens more than $42,000,000. Besides this, the separate states had large debts, of which the general government later assumed about $18,000,000.

His belief that the debts should be paid at face value and that the States' debts incurred during the Revolutionary War should be paid out of the common treasury laid the foundation of public faith in the government's promises. He did his work so well that forty years later Daniel Webster said of him: "He smote the rock of national resources, and abundant streams of revenue gushed forth. He touched the dead corpse of Public Credit, and it sprang upon its feet." *He raised the money*

by a tariff or duty laid on imported goods. Later, an *excise* tax was laid on distilled spirits; a member of Congress said th s was like "dri ıking down the na ional debt."

REFERENCE: Sparks, *The Men Who Made the Nation*, (Macmillan).

VI. Doubling the size of the Country: the Louisiana Territory:

Thomas Jefferson and the purchase of Louisiana; the "Lewis and Clark" exploring expedition.

1. *Thomas Jefferson:*

Thomas Jefferson has already been mentioned as the "Father of the Declaration of Independence"—now as president he comes more clearly into view.

"Tall in stature, he was not outwardly an impressive figure. His red, freckled face wore a frank, good natured expression, but he lacked dignity and poise. 'His whole figure had a loose, shackling air' wrote a contemporary; 'A laxity of manner seemed shed about him . . . even his discourse partook of his personal demeanor. It was loose and rambling.' With his blue coat and red waistcoat, his green velveteen breeches, yarn stockings, and slippers down at the heels, he seemed to an English visitor, who saw him in 1804, 'very much like a tall, large-boned farmer.' Jefferson would have been the last to resent this epithet. No man had a more profound respect for tillers of the soil." (Johnson: *Union and Democracy*, pp. 128–129.) Henry Adams said, if Jefferson could have had his way he would have made the United States "an enlarged Virginia—a society to be kept pure and free by the absence of complicated interests, by the encouragement of agriculture and of commerce as its handmaid." "He hated cities and factories and dreaded the growth of the manufacturing and capitalist class."

Jefferson and Patrick Henry were friends. Jefferson heard Henry make his famous "taxation without representation" speech in the House of Burgesses in 1765; he stood in the doorway, "an entranced listener, thinking that Henry spoke 'as Homer wrote.' "

His father (of Welsh descent) died when Thomas was but fourteen years old; his will said that Thomas was to receive a classical education, and that he should never be permitted to neglect his health and strength. Jefferson went to school to Rev. James Maury of Huguenot descent, with whom he studied Greek and Latin; there he became noted for his scholarship, industry, and shyness. He could run, chase foxes, and was a bold and graceful rider.

When only sixteen, never having seen a large town or even a large village, he started off for William and Mary College, in Williamsburg. Details of his life there can be woven into a single story. It is interesting to note that Jefferson, John Marshall, and Henry Clay, all studied law under George Wythe, one of the greatest lawyers of that day. Other details of his career are—his democratic reform, his idea of educating the people; his life in Paris; his inauguration; "peace, his passion;" the purchase of Louisiana; New Orleans, the gateway of the Western territory; France regains Louisiana from Spain and our Western people fear that the mouth of the river will be closed to their trade; Livingston and Monroe, working for our interests in France, seize the opportunity to purchase Louisiana for $15,000,000. Livingston after signing his name to the treaty "rose and shook hands with Monroe and Marbois; 'We have lived long,' he said with emotion, 'but this is the noblest work of our lives.' "

Montgomery: *The Beginner's American History*, pp. 162–171, has a child's story of Thomas Jefferson.

2. *The Lewis and Clark Expedition:*

Material for the "Lewis and Clark" Expedition story (1804–05) is easily available and nothing more need be said about it here. Every public matter has its advocates and opponents; the following verse from one of the issues of the "*United States Gazette*," of that time says

"Herostratus of old, to eternize his name
Sat the temple of Diana all in a flame;
But Jefferson lately of Bonaparte bought
To pickle his fame, a mountain of salt."

VII. The War of 1812: The United States fights for the freedom of the seas.

In 1805 Nelson at Trafalgar made England mistress of the seas. All Europe was then engaged in a war in which England tried to break the power of Napoleon in France. Then "no flag appeared on the high seas except those of England and the United States." England needed sailors so she allowed her men-of-war to cruise along the American coast, overhaul American trading vessels and take seamen who could not prove they were American born; "then she further insulted this country by saying no neutral ship might trade with France or her allies until she had first touched at a British port and paid re-exportation duties." We went to war. (See the Seventh Grade course of study.)

For Fifth Grade purposes possibly the most concrete incidents to tell are: (a) a few actual stories of impressment; (b) a story of a ship that got captured; (c) an adventure of a particular privateer; (d) an account of the bombardment of Fort McHenry and the writing of the "Star Spangled Banner," our national anthem, by Francis Scott Key; (e) the Battle of New Orleans which will bring out the story of Andrew Jackson.

Madison was President at the time; the names of Henry Clay and John C. Calhoun, the two "war hawks" who helped bring on this war with England, and that of Daniel Webster who fought in Congress to avoid the war, should be mentioned here. See Hart: *Conetmporaries*, Vol. III, pp. 385–389 for an experience of impressments told by Capt. Basil Hall, a Midshipman on board the British man-of-war Leander which searched vessels for British seamen; Gambrill: *Leading Events of Maryland History* for the War of 1812 and Maryland's Part in it; Montgomery: *A Beginner's American History* for the story of Andrew Jackson and the battle of New Orleans, told for children. For the more ambitious student of history, Henry Adams' *History of the U. S. under Jefferson and Madison*, the standard work and delightfully written, will give all the concrete details that might be needed (9 vol., Scribner).

VIII. Coming of the "Age of Machinery":

"Inventors are as useful as statesmen. They have changed the manners and customs of the world and opened new occupations to men and women. They have made a new basis for aristocracy and established a premium for personal worth. They have drawn continents closer together and given direction to world politics."

1. *The coming of the factory to America:*

We will have to go back to the factory conditions in England at this time in order to get the stories of Richard Arkwright and other inventors of spinning machinery; Edward Cartwright and the power loom; and James Watt and his steam engine. When the story of the invention of the cotton gin by Eli Whitney is added we have the inventions that really revolutionized the industry and commerce not only of England and America, but of the world.

Just after the Revolutionary war Tench Cox, a Philadelphia manufacturer, made vigorous efforts to secure a set of the Arkwright models. He sent an agent to England who offered a large reward for a full set, in metal, of the models. At the same time advertisements appeared in the papers of the United States promoting manufacturing in every possible way.

Samuel Slater, apprenticed to Arkwright, heard of the liberal bounty granted by the legislature of Pennsylvania to a person who had succeeded but poorly in constructing a carding machine, and of further rewards for the promotion of manufacture; he decided to come to America secretly, because it was unlawful for such a workman to leave England or for any one to bring away drawings. His offer to Mr. Brown of Pawtucket to produce "as good yarn as they do in England" was accepted and in 1790 the first factory in America was completed at Pawtucket—the "Almy, Brown & Slater Co."

The Rhode Island Agricultural Society said of Slater at his death:

"What shall the people of New England do for him who first brought us the knowledge of manufacturing cloth by machinery moved by water! In England, he would in life be ornamented with a peerage; in death, lamented by a monument in Westminster Abbey. The name of Slater will be remembered as one of our greatest public benefactors. Let not the rich in this adopted country envy the product of his labor, his extensive opulence, his fair and elevated character. Let the poor rise up and call him blessed; for he has introduced a species of industry into our country which furnished them with labor, food, clothing, and habitation."—Brooks, *Story of Cotton.*

By 1814 Francis C. Lowell had built the first complete mill in America, at Waltham, Mass., all the processes of carding, spinning, weaving, and printing being carried on under the same roof.

2. *Improved methods of carrying passengers and freight:*

a. The story of Robert Fulton and the first successful steamboat in America (1807).

For a recent biography of Robert Fulton, see Dickinson: *Robert Fulton,* John Lane Co. Montgomery's *A Beginner's American History* contains a story for the child. Add to these the following references which might be consulted for all the stories of inventions:

Mowry. *American Inventions and Inventors.* Silver, Burdett & Co.
Piercy. *Great Inventions and Discoveries.* Merrill Co.
Burns. *The Story of Great Inventions.* Harpers.
Forman. *Stories of Useful Inventions.* Century Co.
Holland. *Historic Inventions.* Jacobs.

b. The first screw-propeller boat to cross the ocean: The *Robert F. Stockton* built in an English ship yard by John Ericsson, a Swedish engineer (1839) who spent the rest of his life in New York

c. "Good roads" and canals: The first "good road:" the Cumberland Road. Henry Clay and Albert Gallatin were its "Fathers;" "macadam," the invention of John Macadam was used upon it in its last stages of construction (1806–1838).

The Erie Canal: Governor DeWitt Clinton's activities to have it built (1825).

3. *Sending news swiftly—the first telegraph:*

From Washington to Baltimore: Samuel F. B. Morse (1844).

4. *Improving postal service:*

The post roads alone will make an interesting project to study. A map of the post routes in 1790 (See Sparks' *Expansion of the American People*, p. 250) contrasted with one in 1840 and one at the present time would be instructive.

In 1792 the postal routes were extended from Richmond, Va., across the mountains to Danville, Kentucky. By 1800 they were extended into Tennessee; to Syracuse, New York; up the Susquehanna to northwestern Pennsylvania; through the Northwest to Zanesville. By 1803 Cincinnati and Detroit were connected by a route. The average rate for all letters was about 10 cents but newspapers were carried free.

5. *Improving the farmer's crop: Cyrus McCormick and his reaper* (1834).

"In 1800 we were a nation of farmers. . . . As we advanced westward there were vast quantities of rich land which could be cheaply bought. The settlers on this land were men of brains as well as brawn, and in tilling of the soil they used better methods than had ever been used before. In 1825 they had thrown aside the wooden mold-board and were using the cast-iron plow. By 1835 they were using threshing-machines to separate the grain from the straw instead of beating it out with the flail or treading it out with the slow feet of oxen. In 1840 scythes were being cast aside and the McCormick Reaper—first patented in 1834—was making it possible for one man with a team of horses to cut as much grain as ten men could cut with a scythe or cradle." (Forman: *History of the United States*, p. 298.)

NOTE: The plan might well be carried out here of teaching only such inventions as were in use by 1840, leaving the others to be discussed under Topic XIII: "The progress of the age of machinery." The teacher should decide whether Elias Howe's invention of the sewing machine (1846), and McClay's invention of shoe machinery are to be included in the early or the later stage. For further material on inventions and manufactures see: Coman, *Industrial History of the U. S.*, Bogart, *Economic History of the U. S.*, Wright, *Industrial Evolution of the U. S.*, Carlton, *History and Problems of Organized Labor*, and Callender: *Economic History of the United States* (Ginn & Co,).

IX. Life in the different sections of the republic: an industrial and social contrast.

1. *A cotton plantation of the South—"King Cotton"*

Probably Brooks, *The Story of Cotton* (Rand, McNally, Co.) gives as interesting and graphic an account of the Southern plantation life as can be found conveniently anywhere. The outline of the story as he tells it covers the following points:

"The master's domain: the field hands; cotton picking and the gin; wagon drivers; the steward; the cobblers, carpenters, wheelwrights, blacksmiths; other activities of the slaves; duties of the mistress; life and comfort of the slaves; relation of 'master's children to the slaves; attachment of master and servant; attending church; some of the evils of the plantation system."

Life on such a plantation in the South resembles closely the feudal life of the middle ages. Its charm can be vividly pictured; and its disadvantages for progress also shown.

2. *A new England factory town:*

(A plan for this story will be worked out during the year.)

3. *A Middle States (Pennsylvania) farm:*

(A plan for this story will be worked out during the year.)

4. *A Western community:*

(Such as Eggleston describes in his *Hoosier School Boy and Hoosier School Master.*)

(A plan for this story will be worked out during the year.)

NOTE: As each story is worked out it will be mimeographed and given to all the teachers of the Fifth Grade Group. Probably the best references for the teachers are Callender: *Economic History of the United States,* pp. 271–487; and Coman: *Industrial History of the United States* and others mentioned at end of Section VIII.

X. The republic expands to the Pacific:

Use the "expansion" topics as the occasion for review. This topic represents the third "wave" of expansion. "The first great wave" was that when the stream of pioneers—Boone, Sevier, Robertson, etc., 'empire builders,' passed through the Alleghanies into the forest lands of the Ohio, the Tennessee, and the Cumberland Valley (See Roosevelt: *The Winning of the West*). . . . . The "second wave" followed the War of 1812, filling the Indiana and Illinois territories to the north and the Mississippi and Missouri territories to the south and bringing in five new Western states (Indiana, Mississippi, Illinois, Alabama, Missouri) (1816–1821).

"The third and most wonderful era of westward expansion (1835–1848) carried our boundary across the Rockies and Sierras to the Pacific Ocean."

Keep in mind the importance of the connection between *westward expansion* and *slavery.*

1. *Texas:*

The study of Texas and the war with Mexico will bring out two interesting men —"Davy" Crockett and Sam Houston. Keep clearly in mind the American claims against Mexico. By the treaty of 1819 we had relinquished Texas. Senator Benton, of Missouri, the Congressional champion of the far West said in Congress "with true western passion"—"The magnificent valley of the Mississippi is ours, with all its fountains, springs and floods, and woe to the statesman who shall undertake to surrender one drop of its water, one inch of its soil, to any foreign power." He was ready for a war with Spain, believing that it would give the United States the Floridas and Cuba: and that it would "free the New from the Old World." The United States was willing then to relinquish any claim to Texas that it might gain Florida (1820). Later we made attempts under Adams and Jackson to buy Texas, for already it was filled with many of our people carrying on life just as it was carried on in the Southern states. Texas fought against her Mexican rulers and became independent; then she asked to be admitted into the Union as a state. Texas was admitted in 1845; and a war with Mexico followed which resulted in our acquiring California and New Mexico for which we paid 18 million dollars to the Mexican government (1848).

Sam Houston deliberately settled in Mexico to help plan a revolt of the Americans against Mexico. He was elected Commander-in-Chief of the Texan troops. In the attack on the Alamo, an old Texan fortress at San Antonio, David Crockett, a daring Tennessee hunter and marksman, lost his life after a desperate hand to hand struggle with the men of Santa Anna's army. It will interest the class to know that Ulysses S. Grant and Robert E. Lee fought in the war with Mexico in 1848.

2. *Oregon:*

Oregon's story is that of the "fur trader, missionary and settler." As early as 1792 Captain Gray with a Boston trading ship sailed into the Columbia river; Lewis

and Clark, by exploring the Louisiana territory, strengthened the claims of the United States to the Oregon territory. John Jacob Astor attempted to plant a trading post at Astoria which his men treacherously turned over to the British at the opening of the War of 1812; the British rechristened it Fort George. South along the coast Spanish Missions at San Diego, Monterey and San Francisco sold hides and tallow to Yankee trading ships on their way to China for the products of the East. Routes across the continent from St. Louis to the Platte, the Green, the Yellowstone and the Snake Rivers were being found, and a wagon route through the Rockies was made from Salt Lake, across the Sierras, and the deserts of Nevada and Utah to the coast. Lectures on the Oregon Country and its riches were (in 1830) being given in New England. In 1832 Nathaniel Wyeth of Cambridge, Massachusetts, led a party of New Englanders to establish a trading and fishing post on the Columbia River. Missionaries and their families soon followed. Among them was Rev. Marcus Whitman. Mr. Whitman took a wagon through South Pass and over the mountains to the Snake River, and began an agricultural colony which about 6000 persons had joined by 1843. The United States had, in 1818, made a treaty with England for joint occupation of the territory with the understanding that either country could bring the agreement to an end by giving the other a year's notice. This, in 1846, President Polk did; and England, yielding to our claim, withdrew and left us a territory as large as Texas which included the States of Oregon, Washington, Montana, and Wyoming.

3. *John C. Fremont, the "Pathfinder" and his guide, "Kit" Carson:*

When it became evident that many explorers from the Eastern States were emigrating to the Oregon Country, Congress sent (because of Senator Benton's persuasions) Lieut. Fremont "to explore the West for the best pass through the Rocky Mountains that would accommodate the oncoming emigration." With "Kit" Carson, a famous hunter, for guide, he explored the South Pass and found it easy for traveling purposes. The next year he went out again to find other paths and reached as far south as the Missions of Monterey in California. He stopped at Captain Sutter's Fort on his way to Monterey and afterward returned to the fort where he succeeded in protecting and aiding the Americans in California until the Mexican War was over.

4. *Gold and the rush for the Pacific—"The Forty-niners":—*

On the very day the treaty of peace was signed with Mexico, when California became a territory of the United States, gold was discovered at Sutter's Fort (Jan., 1848). The children can compare stories their fathers and grandfathers have to tell of the rush for the Klondike with the stories of the famous "1849" rush to the Pacific. In one year the population of California increased from 6000 to over 85,000 souls. Says Muzzey: "The 'Forty-niners,' as these gold seekers were called, came almost wholly from the free states of the North. Migration across thousands of miles of desert country did not tempt the plantation owner with his slaves. Consequently, when delegates from the new California immigrants met at Monterey, in September, 1849, at the call of the military governor, Riley, to devise a constitution, they drew up a constitution excluding slavery by a unanimous vote."

And those immigrants—"Merchants, farmers, physicians, lawyers, artisans, shopkeepers, and servants abandoned their business to stake out claims in the gold valleys from which thousands took their fortunes in a few weeks. The fever extended even to the Atlantic coast. Men started on the nine months' sail around Cape Horn, or, crossing the pestilence-laden Isthmus of Panama, fought like wild animals for a passage on the infrequent ships sailing up the Californian coast. Others went

'overland,' making their way slowly across the Western deserts and mountains in their unwieldy 'prairie schooners,' the monotonous dread of famine and thirst varied only by the excitement of Indian attacks." (Muzzey: *American History*, pp. 356–357.)

XI. The North and South quarrel over the extension of slavery to the territories.

Incidentally, from many of the preceding stories, the child has gained some knowledge of the slavery question in the States and in the Territories. The teacher might go back even to the Northwest Ordinance of 1787 and recall that no slavery was allowed there. This may bring up the question as to what was done about slavery in the Louisiana territory; in Texas, in Oregon, and in California.

This story may have to include a simple explanation of the Missouri Compromise, the Compromise of 1850, and the Kansas-Nebraska Bill of 1854. (See outline for Eighth Grade.) It is certainly possible that fifth grade children, if the history-lessons are well planned for developing thoughtful questions from the children may have asked such questions as "What did Benjamin Franklin think of Slavery?" "Did Patrick Henry have slaves?" "Of course, Jefferson and Washington had slaves, but did they really believe in slavery'?'

The names of three men will stand out prominently in this discussion of the territorial regions: Henry Clay, the "Pacificator"; John C. Calhoun of South Carolina, a firm sectionalist, and a "States Rights" man; and Daniel Webster of Massachusetts, the staunch "Nationalist."

Make these three figures stand out clearly and let the class see them, debating the vital question on the "floor of Congress." Show their pictures to the class, tell a few incidents that will reveal the character of each man, and in a simple, concrete way give both sides of the sectional feeling regarding slavery.

1. *Henry Clay the "Mill Boy of the Slashes."*

Born in Virginia in the sections of the "slashes" (Patrick Henry's section also); his parents; his meager education; his removal to Richmond; his work in a mercantile house there; his clerkship with the celebrated lawyer, Chancellor George Wythe; his determination to become a lawyer; his removal to Lexington, Kentucky, then a frontier town; his power to defend criminals; one of the "young Republicans" during the War of 1812; his long and interesting career in Congress: his interest in the Cumberland Road; his interest in the question of slavery in the territories; his part in the Missouri Compromise not failing to avoid the error which attributes to him the authorship of the Thomas Amendment which proposed the line of 36° 30′; his personal characteristics—manner, power of his speeches. Schurz, *Henry Clay*.

2. *John C. Calhoun:*

Born near Abbeville, South Carolina; his early education; his later education at Yale University; at the law school of Litchfield, Connecticut; his views on the leading questions of the day; an example of the Southern sectionalist as John Quincy Adams was of the Northern, his debates with Clay and Webster in Congress. Hunt's *Calhoun*.

3. *Daniel Webster:*

Born among the hills of New Hampshire; his parents; his sisters and brothers; the "woodchuck story;" his interest in nature; his love for books; his education at Phillips Exeter Academy and Dartmouth College: his removal to Boston, Massachusetts, where he became a lawyer famous for his speeches and debates, the most famous of which was that with Senator Hayne of South Carolina on the floor of the Senate; the effect of his personality and his speeches together.

The following information taken from Muzzey, pp. 358–359, may help the teacher to keep the question of this time clear in her own mind for, unless she is herself perfectly clear about the compromises and the Kansas-Nebraska bill, she cannot hope to make the subject clear to children. (This, of course, must be an oral explanation, adapted to the intelligence of the class.)

Compromise of 1850.—The Missouri Compromise (1820) had excluded slavery from the Louisiana territory, north of 36° 30′. The following table shows the questions that were being angrily debated about 1848–50, and the demands of each side: (Muzzey, p. 359).

Question of	*The South demanded*	*The North demanded*
(1) California	organization as a territory, admitting slavery	immediate admission as a free state
(2) New Mexico	legalization of slavery by Congress (at least below 36° 30′)	the application of the Wilmot Proviso
(3) Texas	the same boundaries as the Texan republic claimed in 1836	a reduction in the size of Texas without any money compensation
(4) District of Columbia	no interference with slavery by Congress	abolition of slavery
(5) Fugitive slaves	a strict law enforced by national authority, with no jury trial for negroes	jury trial for every negro claimed as a fugitive slave

"The debates on the compromise measures called forth some of the finest speeches ever made in the Senate."

"Clay proposed that (1) California should be admitted as a free state; (2) the rest of the Mexican cession should be divided by the thirty-seventh parallel of latitude into the territories of Utah on the north and New Mexico on the south, both organized on the "squatter-sovereignty" principle; (3) the boundaries of the slaveholding state of Texas should be cut down from 379,000 to 264,000 square miles, but in return Texas should receive $10,000,000 from the government to pay her war debt contracted before 1845; (4) the slave trade (but not slavery) should be prohibited in the District of Columbia; (5) a new fugitive-slave law should be enacted, making the recovery of runaway negroes much easier than under the old law of 1793. This measure of Clay's was called the 'Omnibus Bill,' on account of the number of provisions which it included." Lodge, *Daniel Webster*.

XII. One Nation or Two?

The quarrel over the territories broke out afresh when Douglas introduced the Kansas-Nebraska bill (1854) which upset completely the terms of the Missouri Compromise. Clay, Calhoun and Webster now are all dead and the politics of the country are in the hands of other men.

For the first period of this topic, say 1850–1860, two persons will stand out as representing the opinion of the two sections of the country: Abraham Lincoln and Jefferson Davis.

1. *Abraham Lincoln:*

For an interesting account of his life see Helen Nicolay: *The Boy's Life of Abraham Lincoln*. The story should bring out a clear and simple idea of fugitive slaves, the Dred-Scott decision, the "Underground Railroad," and the Lincoln-Douglas debates.

2. *Jefferson Davis:*

Probably the best account for our purposes of the life of Jefferson Davis are those of Oliver Dyer: *Personal Recollections of Jefferson Davis;* W. E. Dodd: *Life of Jefferson Davis*; Trent: *Southern Statesmen of the Old Regime.*

This story should bring out the idea of a state seceding from the Union, and the principles for which the Southern Confederacy with Jefferson Davis as its president, stood.

The declaration of war and the events of the Civil War make Gen. Ulysses S. Grant and Gen. Robert E. Lee stand forth as the most prominent figures.

3. *Gen. Ulysses S. Grant:*

His characteristics as a man and a soldier; emphasize his determination, bulldog persistence, and fertility of resource. The siege of Vicksburg well illustrates his qualities. How he rose to be commander-in-chief and won the war.

REFERENCE: Johnston's *Leading American Soldiers* (Holt), pp. 137–193.

Gen. Robert E. Lee:

4. His characteristics, his soldiers' love for him; his leadership of the southern army —(a) defense of Richmond; (b) Chancellorsville; (c) Gettysburg; opposing Grant in the closing year of the war. Bring out Lee's charm as a man; his conscientiousness, his reluctance to leave the Union and refusal to accept chief command of the Federal armies; his brilliance, dash, and ingenuity as a soldier; his sensible and noble attitude at the close of the war.

REFERENCE: Johnston's *Leading American Soldiers*, pp. 256–311.

XIII. The progress of the Age of Machinery.

Part of this topic will have been touched upon in the industrial arts periods; part in the discussion of current events; part in geography. The history periods should, then, organize the disjointed information and trace the historical development of the various inventions showing the influence of each upon life today.

1. The Trans-continental railroads.

REFERENCE: Paxson, *The New Nation*, p. 25.

2. *How electricity aids home life, travel, transportation, trade.*
   a. Lighting by electricity; Thomas Edison.
   b. Hearing by electricity; Alexander Bell and the telephone.
   c. A new language by electricity; "Wireless" and Guglielmo Marconi.
   d. Riding by electricity; trolley-cars, railroads, automobiles.

3. *The flying machine and the automobile:* How the gas engine made them possible: The Wright brothers and the aeroplane. (See the July, 1915, "*St. Nicholas*" for "What everyone should know about the aeroplane".) Growing uses for the automobile.

4. *Bessemer and the steel industry (steel, iron, coal):*

Growth of cities; the skyscrapers, a type of building peculiarly American; apartment houses; great bridge constructions; etc.

5. *The building of the Panama Canal—Colonel Goethals:*

The story should bring out the topic of civic sanitation and the great work and sacrifice of Jesse William Lazear who gave his life for the cure of yellow fever in the West Indies. Upon Lazear's work was based that of Col. William C. Gorgas in ridding the canal zone of the mosquito and malarial fever. (Connect this with the campaign in Baltimore against mosquitoes under the direction of Colonel Gorgas, 1915.)

6. *Immigration and some problems it has brought:*

Ellis Island; making Americans out of immigrants at Hull House, Chicago, and Jane Addams' great work there:

This topic should trace the development of immigration from colonial times to the present. In that sense it will be a review, recalling the early German and Scotch Irish immigrants; the influx of large numbers of Chinese for work on the transcontinental railroads; etc. Bring out the changing nature of the problems of today—Hungarians, Poles, Russians, and Italians from Eastern and Southern Europe.

7. *The American "Workers:" Labor Unions.*

This is a topic that will touch the life of every child in our schools. The newspapers of the day tell of strikes in the great industrial plants; the "I. W. W." holds meetings in every large city and the newspapers print notices of their meetings; great corporations like the Standard Oil Company, the Ford Automobile Co., etc., are known objectively at least through the products they turn out for man's use; in many of the families represented by the pupils in our schools there are men who belong to labor unions, men who employ men who belong to labor unions, men who are clerks for big corporations that employ hundreds of employees. Here and there, all along the way from the "Period of Discovery" in the Fourth Grade to the close of the "Progress of the Age of Machinery" in the Fifth Grade *labor* in some form has been discussed. The children themselves can get a great deal of the information for the current phases of this topic from their parents at home, from the daily newspapers and from the industrial arts topics. For the teacher who wishes some help on the topic probably the best reference is Carlton, *History and Problems of Organized Labor* (Heath), dealing chiefly with the American situation. Brief chapters on the labor movement may be found in recent treatises on economics, e. g., Seager, *Principles of Economics* (Holt, 1914).

XIV. United States gains "over-sea" possessions:

1. *The purchase of Alaska:*

2. *The Spanish-American War:*

This is such recent history that the pupils themselves will surely be able to bring to school stories their mothers and fathers, their uncles and aunts, their grandfathers and grandmothers tell about the "War with Spain." "The sole aim of the United States was to put a stop to a condition of affairs in the Island of Cuba that had become intolerable" says Dr. Latane. By the terms of the treaty, Spain ceded to the United States, Porto Rico, Guam and the Philippines, the United States paying $20,000,000 for the Philippines.

3. *How the United States has dealt with other countries:*

Her *peace policy* and her part in the International Peace movement. (The School Peace League (Boston, Mass.) publishes much material that may be obtained without cost. See also Gulliver, *The Friendship of Nations*, Ginn & Co.)

Evidence of her peace policy is shown by the frequency with which she has arbitrated many questions: e.g., numerous claims of her citizens against foreign States; the Alabama claims; Alaskan Boundary with England; Newfoundland fisheries with England; etc.

The "*open door*" policy in China—John Hay.

If any child should bring up in class the question of the "Monroe Doctrine" it will be possible to explain it simply: President Monroe, in a message to Congress said that the U. S. does not meddle in the affairs of Europe, and he thought European

nations should not meddle with any independent country of the new world, or try to plant any more colonies. See MacDonald's *Documentary Source Book of American History, No.* 80.

The principle of the "freedom of the seas" for which the United States fought in 1812 is still before us in the great European War of 1914–. President Wilson in a message to Germany declares that the United States will always contend for the freedom of the seas "without compromise and at any cost."

Where to Get Material: Attention is called to the fact that the work of the Fourth and Fifth Grades covers the same general field as that of the Seventh and Eighth. The topics are of course different and their treatment must be widely different to be appropriate to the younger children, yet to accomplish good work the teacher of the lower grades must know a great deal more than is given in the thin little stories that are so often considered good enough for children, and must have a better sense of proportion and continuity than she could obtain by studying a few selected stories to be given the class. It is strongly urged that teachers of the lower grades make a careful study of the topical outlines for teachers of Grades Seven and Eight. The main sources of information are the same, and lower grade teachers are referred to the list of bibliographies in the introductory section, p. 495, and to the references at the end of the Eighth Grade course. Throughout the Fifth Grade course frequent references are given to reliable works in which more or less extensive information may be obtained about the topics assigned. It is realized that this field is a large one, that the teachers cannot with their other work be special students of the subject, and that the course is very largely a new one for the grade. The teacher cannot make all her preparation the first year, but she should have in mind from the first the absolute necessity for much study outside the common school text-books and readers, if she is to make her work interesting and valuable.

N. B.—Credit and great praise must be given the group of forty fifth grade teachers who worked with the zest of research students, during the year 1916–1917, to gather together a body of concrete historical data to add to the course of study.

The material was mimeographed (about100 typed pages) and given out to the Fifth and Seventh Grade teachers for the fields of those two grades are, in part, the same. The following types of materials will show the character of their concreteness and vividness.

Peter Faneuil's letters.
Extracts from The Boston Post.
Drake: *Tea Leaves of 1773.*
Newspapers of Revolutionary times:
Pennyslvania Gazette.
Boston Gazette.
The Massachusetts Spy.

Anderson's Constitutional Gazette (N. Y.)
Bickerstaff Almanac (Boston.)
Tyler: Literary History of American Revolution.
Moore: Songs and Ballads of the Revolution.
John Adams' Diary.
Data on Labor Unions.
Establishing Public Credit (Taken from *Recollections and Memoirs of Washington* by G. W. Parke Custis).
Leaves from Thomas Jefferson's account book.
Alexander Hamilton's Report on Manufacturers 1791. (George Washington and his weaving establishment; Contract made by Robert Carter for negro clothworkers.)
Data on Labor Unions.
Data on gas engines.

SIXTH GRADE

"The pupil should never be allowed to forget that America is the child of European civilization, that it received a great heritage of laws and traditions, and that its own life is unintelligible save as it appears in its place in the history of the world."—Bourne.

The work of the Sixth, Seventh, and Eighth Grades should present one continuous story. The first part, that for the Sixth, presents the European beginnings of American civilization, discloses how and why the New World was discovered by the Old, and shows America as the heir of Europe.

Read carefully and critically "The Teaching of History in the Grammar Grades: Some Suggestions," pp. 473–500.

Outlined in the large, the course covers the following topics:

I. Greece, the first great European teacher.
II. "Rome, Mistress of an enduring world empire."
III. How Germany and France began.
IV. England in the Middle Ages.
V. Life in the Middle Ages.
VI. Great changes bring about the beginnings of our own times.
VII. The expansion of Europe and the beginning of America.

European Ancestors of America

I. Greece the First Great European Teacher:

1. *Greece, the sailor's country:*

The climate; the soil; the size; the sea; the sea in old Greek stories; some famous mythical sailors; these topics will bring out how the early Greeks regarded the Mediterranean and the regions of the world unknown to them.

"Greece is a sailor's country. Long arms of bays cut into the land and invite men to try the gentle water. Long points of land jut into the sea like ships' prows, and islands close together beckon a boat from one to another out from the mainland. So Greeks very early became seafaring people."—Hall: *Europe, the Mother of America*.

"We are taught from early youth to divide the world into continents and are apt to think of the Mediterranean, which washes three of the five, as marking a boundary line between Europe, Asia and Africa. . . . This view is natural enough in London, but appears strange in Constantinople, where business men cross twice daily, in suburban steamers, from one continent to the other. It has always been misleading from the point of view of physical geography, for the countries round the Mediterranean form, both structurally and climatically, a distinct region of the world's surface. But it is historically and politically misleading also. . . . For to the Greeks the Mediterranean area was always a unity and the Mediterranean itself not a frontier, but a highway; they saw the world as 'a rim of convergent coastlands encircling the Midland Sea, which is our Sea.' 'Our Sea' or 'This Sea' was indeed their only name for it. With the countries immediately around it they were tolerably familiar; but the Hinterland beyond, which differed in climate, structure and manners, always remained to them mysterious. . . .

"Every Englishman is familiar with 'the sea;' but the sea of the Greeks is not the sea that we know. Landlocked on all sides, as its name implies, except for the narrow exits at Gibraltar and the Dardanelles, the Mediterranean seems in summer as gentle as an inland lake. Yet to call it a lake is to belie its possibilities. It is in fact double-natured, sometimes a lake far better adapted to oars than to sails, sometimes an ocean, not adapted, as a timid Greek navigator might say, for either; or, to put it in his own language, a lake when the gods are kind and an ocean when they are spiteful."—Zimmern, *The Greek Commonwealth.*

2. *Greece expands to the far-away shores of the Mediterranean World; its colonies:—*

Reasons for expansion; early explorers; Greek ships; the peoples of the Eastern Mediterranean; the peoples of the Western Mediterranean; Greek trade; trading posts and "factories;" starting colonies; the towns on the Black Sea, "Magna Graecia;" the Gallic settlements—("Spain the California of those days") the fringe of colonies on the Africian coast; "Hellenizing" the tribes around the settlements. (The Rhone, the Po, and the Nile Rivers were the only highways into the *hinterland.*)

3. *The growing Greek cities; differences among them:—*

Sparta, the soldier's city; Aegina the sailor's city; Corinth, the "merchant town;" Athens, the "Beautiful," the city of great poets, artists, orators, and generals.

Bring out, very simply, the characteristics of life in several different types of cities in order to get at the character of the Greek people as a whole. Upon the child's understanding of this will depend his understanding of why the different Greek cities acted as they did when concerted action was necessary.

Life in Sparta and Athens should be studied in detail. Let the class really live the life of the city:—city scenes; the city wall (Sparta had none); great statues and buildings; streets; houses; the market place; the people; the home itself; schools; the public games on the Olympian field; the government; famous Spartans; famous Athenians.

(Athens' trade will bring out the fact that though three miles from the coast, she had a port, Piraeus, with which she was connected by a long lane with high strong straight walls on both sides, the famous "Long Walls." Piraeus was an important point both for trade and war. Themistocles planned and built it in preparation for the great war with Persia.)

There is a chance here to use some well selected source material. As an example of this—Webster: *Readings in Ancient History*, pp. 98–102, gives Plutarch's account

of Alcibiades' boyhood and youth, which might be used to advantage with sixth grade children, to show some details of education and the customs of the times.

4. *How the Greeks governed:*

Many questions relating to government will have been brought out in the discussion of life in the great cities but the subject should be treated somewhat more fully than the other topics have made possible.

a. Old tribal days: council of elders, assembly of fighting men, chieftain who in time becomes a shepherd king. "Germs of later European political institutions and even of our own in the United States today" (Robinson and Breasted, p. 129).

b. Rise of the city-state, "the only nation which the Greeks knew. Each city-state was a sovereign power; each had its own laws, its own army and gods, and each citizen felt a patriotic duty toward his own city and no other." King, council, assembly. The stronghold on the acropolis. Close relation of religion and government. King as ruler, judge, general, and priest. Disorder often existed.

c. How some men came to be large landholders, and formed a class of hereditary nobles. Their control of council, dominance in the government, oppression of the poor. The "tyrants" how they gained power, methods of governing. "Age of Tyrants:"

"As a group, the leaders of this age made an impression upon the mind of the people which never entirely disappeared.

"They were the earliest statesmen in Greece, if not in history, and some of them were led by high-minded motives in their control of the Greek states. The people loved to quote their sayings, such as 'Know thyself,' a proverb which was carved over the entrance of the Apollo temple at Delphi; or Solon's wise maxim, 'Overdo nothing.' There came to be collections of such sayings, and the most famous of the men of the age were grouped together as the 'Seven Wise men.'—(Solon of Athens, Periander of Corinth, Chilon of Sparta, Thales of Miletus, Pittacus of Mitylene, Bias of Priene, and Cleobulus of Lindus.)

"The Age of the Tyrants was a period of unprecedented progress among the Hellenes, in industries, in commerce, and in the higher life which we call civilization." (Robinson and Breasted: *Outlines of European History*, pp. 158–159.)

d. Rise of democracies; how aided by tyrannies.

e. Study of development of political institutions in Athens, one of the leading cities, as a type—kingship, aristocracy, wealth and the oligarchy, tyranny, democracy. Archons. Draco and written laws. Solon and his reforms, relation of government to social problems—

"The verses of Solon (which in a later day when the Greeks had begun to write prose would have taken the form of political speeches) pictured the distressing condition of the Attic people with startling effect. . . . To save the peasants, he declared void all mortgages on land and all claims of creditors which endangered the liberty of a citizen. . . . Furthermore, citizens who had been sold into foreign slavery to satisfy such claims Solon repurchased at the cost of the State, and they returned as free men to Attica. But Solon was a true statesman, and to the demands of the lower classes for a new apportionment of lands held by the eupatrids he would not yield. He did, however, set a limit to the amount of land which a noble might hold.

"Further, he proclaimed a constitution which gave all but the very lowest classes a voice in the control of the State. It was not democratic, for it recognized an aristocracy of birth. There were three political classes according to income.

Only the men who belonged to the first class, with the largest income (five hundred measures of grain, or of oil and wine together), could hold the highest offices in the State; but the humblest free craftsman could vote in the Assembly of the people. Otherwise, the established institutions were little changed by Solon. He left also a written code of law by which all free men were for the first time given equal rights in the courts. Some of these laws have descended to our own time and are still in force.

"Solon is the first Greek statesman of whom we obtain an authentic picture, chiefly through those poems of his which have survived to our day." Robinson and Breasted, pp. 155–7.

"The most fatal defect in Greek character was the inability of these states to forget their local differences and jealousies and to unite into a common federation or great nation including all Greeks." Robinson and Breasted, p. 134.

5. *Greece and her neighbor Persia fight for world power:—*

"Just at this point when the Greek was standing on the threshold of a new world, the Persian hosts suddenly advanced to the Aegean Sea and absorbed the Ionian cities." Had the Greeks developed the power to throw off this great Asiatic foe?

Greece had two foes: one in the West, Carthage,—another in the East, Persia.

Bring out characteristics of Persian life; study pictures of the great Persian temples and give enough details to show why Persia was a dangerous enemy of Greece: King Darius; Battle of Marathon, "which the Athenians celebrated as their bravest victory for hundreds of years:" the work of Themistocles in preparing Greece for the next onslaught of Persia which he knew would come by sea; the long wait for the Persians (they were installing their new King, Xerxes); Thermopylae; the Battle of Salamis (480 B.C.); the end of the struggle—"Athens the queen of the sea and the savior of the Greeks."

6. *The "Age of Pericles;" the glory of Greece."—*

The Delian Confederacy; Pericles' great imperialistic dream to make Athens the "head of a noble Greek empire;" his thirty years of progress; the jealousy of the other cities, particularly Sparta; the war between Sparta and her allies, and Athens and her allies—"the whole Greek world from the Aegean islands to Magna Graecia was dragged into it;" Athens forced to submit to Sparta.

Discussion of progress and social life in the Age of Pericles will make the names of Phidias, the great sculptor and architect (who built the wonderfully beautiful Parthenon): Sophocles, Euripides and Aeschylus, the great writers of tragedy; Aristophanes, writer of comedies: Socrates and the Sophists; Herodotus, the "Father of History" and Thucydides, historian of the Peloponnesian war—stand out and their personalities should live again in the class-room.

7. *Sparta becomes the leader of Greece.*

8. *Thebes takes on the leadership, and breaks Sparta's power:—*

Epaminondas, the great commander and creator of the Theban navy; breaking Sparta's power: "holding Athens in check on the sea."

But it is a 'one man power' and at Epaminondas' death, neither Athens, Sparta, nor Thebes could resist a conqueror from the outside.

9. Alexander the Great of Macedon, conquers Greece and the great East.

Macedon's growing power; King Philip (350 B. C.); Demosthenes the great orator and his burning appeals to the Athenians; the young Alexander; Aristotle, his teacher; Alexander the soldier; his love for Greek ways and thought; his conquest of the world; establishing Greek ways in Persia; the city of Alex-

andria; "Hellenizing" the world. The three centuries following the death of Alexander (323 B. C.) are termed the "Hellenistic Age", for Greek ways, with Alexandria as the center of distribution, were being adopted and modified by all the peoples of the world. At the same time "the culture of the Orient" gradually began to change Greek thought. Several Greek scientists are of interest—Euclid, great geometer; Ptolemy, the geographer; Hippocrates, "Father of Medicine;" Eratosthenes, who calculated the circumference of the earth and was very close to correct.

10. Enduring Greek influences upon our present civilization.

The work and method of the Greek architects and sculptors; the Greek idea of beauty; Greek literary ideals; the science of grammar; the alphabet; Greek philosophy; many of the principles of geometry; Greek ideals of athletics.

"The Greeks had brought the world to a higher level of civilization than men had ever seen before, but they had not been able to unite and organize it. Not even their own Hellas was a unified nation. The world which the Greeks, as successors of the Orient, had *civilized* was now to be *organized* and *unified* by a much less gifted but more practical race, whose city on the Tiber was destined to become the mistress of an enduring world empire." Robinson and Breasted, p. 239.

II. Rome, "Mistress of an enduring world empire," organized the ancient Mediterranean world and spread civilization.

1. The beginnings of the city of Rome:

Its location in the Mediteranean world; Romans, a part of the Latin tribe (one of many tribes of Italy); Rome's fortunate location on the hills overlooking the Tiber; a good harbor; neighbors; her busy dock (the ships of Greece and Etruria there, Roman ships in time built with these as models); Roman gods; kings.

"The Greek merchants bring written invoices and bills. The Romans, unable to read them at first, are slowly learning to spell them out, and thus finally to recognize a Greek word here and there. Ere long they are scribbling memoranda of their own transactions in these Greek letters, which in this way become likewise the Roman alphabet, slightly changed of course to suit the Latin language used in Rome. It is this alphabet which descended from the Orient through Rome to *us*.

"The Greek merchant on the dock has a sack full of copper coins and a smaller purse filled with silver ones. These too the Roman tradesman learns to use, against the day when his own city shall begin to coin them. He is obliged to accept also the measures of bulk and of length with which the Greek measures out to him the things he buys. The peasant hears the merchants on the dock speaking Greek. He too learns the Greek words for the clothing offered for sale, for household utensils and pottery and other things connected with traffic. These words become part of the daily fund of Roman speech.

"The Latin peasant looks on with wonderment at all this world of civilized life of which he knows so little—a world in which these clever Greeks seem so much at home." (Robinson and Breasted, pp. 249–251.)

2. Rome becomes a republic:

It is an *imperial* republic; ruled by nobles—("patricians"), and developed much like the government of Greece: (a) a written code of laws engraved on twelve tables of bronze: (b) Senate, a council of old men who largely controlled affairs; (c) two Consuls, elective magistrates of the same power; (d) the peasantry ("plebeians") composed of the people of the district immediately surrounding the city.

A story of the Roman Forum can be made to bring out many of the details of political and social life of the time: occupations, dress, business, religion, pol-

itics, the army, a Triumph, etc. (See Lovell: *Stories in Stone From the Roman Forum.*) In addition, there should be a detailed study of life within a Roman home. (See Johnson: *Private Life of the Romans.*)

3. Rome conquers all Italy:

Border wars; Etruscan wars; wars with the Gauls, with the Samnites; with the cities in Magna Graecia; "Sometimes she was beaten in the bloody battle, but in general she won and kept adding new lands to her territory until she was mistress of all the land from the Arno River to the southern tip of the country—a great territory 500 miles long."—Hall.

Then followed the business of establishing Roman rule in the conquered territory, building military roads and organizing an army so that she might keep what she had gained. Money from trade with all parts of the country begins to be a power. (There is opportunity for much good map-work in this topic.)

4. Rome and her neighbor Carthage compete for commercial supremacy:

Relative strength and weakness of the two; Carthage, "Mistress of the seas," boasted that a Roman could not wash his hands in the sea without asking her permission; the fleets of Carthage and her dominions; Sicily "a stepping stone between the two countries" becomes the first "bone of contention;" a war twenty years long gave Sicily to Rome; again after more than twenty years they contend again, this time for Spain, and Hannibal is defeated; Spain is added to Roman territory;—once more they contend for all the rest of the Carthaginian colonies—this time on the shores of Africa. *Carthage is destroyed.*

"A new empire—Italy, Sicily, Spain, Africa, and the islands of the sea—had grown up in the West, and Rome was mistress of it."

5. Many changes creep into Roman life because of her "world dominion":

Influx of Greek slaves and captives of war from the Greek cities in Italy and Sicily; the capitalists; Greek slaves become teachers of Roman children who learn to read Greek and to love Homer; one or two of these famous Greek teachers; sending Roman youths to Athens to receive a Greek education; Horace, the Roman poet, said that Rome, the conquerer, was being conquered by the civilization of the Greeks. Books, music, works of art, and architecture—these the Romans borrowed from the Greeks; and they spent their own efforts in building up "a more stable and powerful organization than any devised by the Greeks." This topic will show how military power began to undermine Roman institutions:

Marius and Sulla; the rise of Julius Caesar; Pompey.

6. Pompey makes Rome mistress of the Eastern Mediterranean.

"By the year 60 B. C. most of Alexander's huge empire was in Roman hands;"—the effect upon Rome of coming in contact with the "richest and most cultured people of the world."

7. The conquest of Gaul:

Caesar extends the boundaries on the west to the Rhine River and to Britain:

A war with barbarians; conditions of the vast hordes of barbarians in Western Europe; Rome now becomes the *teacher;* Caesar in Britain; Caesar writes the story of his "conquest;" the effect of the conquest upon the Roman people.

The Gallic wars afford an opportunity for using the constructive activities of the sixth grade child; they might build a miniature Roman camp showing the military conditions and reproducing many of the weapons used in the warfare of that time.

8. The Great Roman Empire: Rome rules the world:

Caesar, "Dictator" for life, the first emperor; the Age of Augustus—literature, science, social life, travel, education.

"The population of this vast Empire, which girdled the Mediterranean, including France and England, was made up of the most diverse peoples and races. Egyptians, Arabs, Jews, Greeks, Italians, Gauls, Britons, Iberians (Spaniards)—all alike were under the sovereign rule of Rome. One great state embraced the nomad shepherds who spread their tents on the borders of the Sahara, the mountaineer in the fastnesses of Wales, and the citizens of Athens, Alexandria, and Rome, heirs of all the luxury and learning of the ages. Whether one lived in York or Jerusalem, Memphis or Vienna, he paid his taxes into the same treasury, he was tried by the same law, and looked to the same armies for protection." (Robinson and Breasted. *Outlines of European History*, pp. 276–277.)

9. A new religion in the Roman world; the coming of Christianity:

Beginnings; Christian martyrs; missionaries; power and growth; a Christian emperor, Constantine—the "triumph of Christianity."

10. Rome's power declines:

11. Enduring influences of Rome upon our present civilization:

She unified the whole Mediteranean world under one Empire, thus brought together the contributions of all to civilization; her principles of law and government—"the idea of an absolute ruler, organized and centralized government, generous adoption of foreigners, laws and the habit of obeying law." (Hall, *Europe, the Mother of America.*) The idea of "good roads," their value and the process of their construction.

III. How Germany and France began.

1. The barbarians of the North invade the Empire and complete the work of breaking it up.

The German tribes—Franks, Vandals, Goths, Burgundians, Saxons, Lombard's (See Tacitus' description, Leaflet No. A 27, McKinley Co.'s *Illustrated Topics for Ancient History*); how they fought; the Goths under Alaric conquer Rome, and spread into Gaul (France); the scorn of the "Gallic gentlemen" for these barbarians; the Franks, become Christians under Clovis, conquer parts of the old Roman Empire; Charlemagne, king of the Franks.

2. Charlemagne and his great Empire:

Charlemagne's wars, his laws; the Frankish assemblies (held twice a year, first in one city, then in another); education; books; his people's love for him; reforms and progress; his enemies, the Northmen.

Let the pupils read parts of Einhard's life of Charlemagne; it is simply told and is a contemporary account of the great man, Einhard being Charlemagne's son-in-law.

3. The beginnings of Germany and France.

Charlemagne's death; the dividing of his empire; East Frankland—Germany; West Frankland—France; the Mohammedans appear; growing power of the Northmen.

4. Enduring influences of Charlemagne's life and work upon our present civilization:

"The eighth century—that immediately preceding Charlemagne's coronation—is commonly regarded as the most ignorant, the darkest, and the most barbarous period of the Middle Ages, yet in spite of this dark picture there was promise for the future. It was evident, even before Charlemagne's time that Europe was not to continue indefinitely in the path of ignorance." Latin was

kept alive particularly by the church; education (reading) was encouraged; Roman textbooks were continued in use; books were more carefully copied than before, a matter of no small moment to us even to this day, since through the copying of manuscripts the annals of the past were preserved for us.

5. Age of disorder; the great landholders rise to power; feudalism.

IV. England in the Middle Ages.

1. The Norman conquest:

The Angles and Saxons; King Alfred and learning; invasion of the Danes; the coming of William of Normandy; Norman rule; castle life established, "Doomsday Book," laws, progress of England under William.

2. Englishmen learn to desire good government:

The good laws of Henry II; King John and the "Great Charter," the beginnings of Parliament.

3. England acquires territory: Wales and Scotland:

Border warfare; Edward I conquers Wales; the title of the "Prince of Wales;" he conquers Scotland (Wallace and Bruce).

4. England and France contend for supremacy: a war of a "Hundred Years:"

(Treat briefly).

V. Life in the Middle Ages:

Life in country and town; castle life; religion and the church. Among the topics will be—

Classes of the people; Feudalism: getting and holding land; vassals; the castle; the warlike spirit of the age; knights, tournaments and sieges; knightly training and ideals—times of chivalry; pastimes; the common people: workers, farmers, the manor land; dues, taxes, hard living, revolts of the workers; how villages and towns grew up; townsmen and their "guilds," shops, and laws; trading; religion; monasteries and education.

VI. Great changes bring about the beginnings of our own times.

1. *Great social changes:*

The great social changes that mark the transition from the Middle Ages to modern times took place slowly, and no exact date can be assigned, but we may think of them as coming to climax between 1400 and 1600. The changes include especially: (a) the rise of great national states, in place of the loose groupings under the feudal regime; (b) the break-up of the powerful, universal Christian church of western Europe—the Protestant Revolt; (c) some inventions: printing from movable type, paper, Arabic numerals, the compass, the astrolabe, etc.; (d) the expansion of Europe through the finding of a water route to the East and the discovery of the western world, leading in turn to (e) the Commercial Revolution—cities on the Atlantic coast become the chief centers of trade instead of those in Italy, the volume of trade increases enormously, great quantities of silver and gold are brought to Europe from the new world and increase the world's supply of money and thus make it possible to carry on the larger trade; the magnitude of the new trade leads to the formation of chartered companies (corporations) and fosters the development of a class of capitalists.

2. National rivalries for over-sea possessions and for expanding commerce:

These great changes led to intense national rivalries for possessions over-sea and for the expanding commerce. The general facts must be developed for the children through the study of simple incidents and selected persons. For our

purpose the expansion of Europe in the west is the most important topic, because its study answers for us the questions of how the Old World found the New and what Europeans did in America.

VII. The expansion of Europe and the beginnings of America.

1. The crusades and their results:

Reasons for *pilgrimages;* reasons for the Crusades; result of the Crusades —an increased interest in travel, a direct acquaintance with the great trading cities of the South and East; a growing interest in commerce and expansion, a more widespread desire for education.

2. A new route to India is wanted. How it is found:

Disturbance of travel by the Turks; Marco Polo's travels and the geographical knowledge he gave the world; Prince Henry of Portugal and other famous Portuguese sailors—the *uncovering of the African coast;* the new route to India—found at last!

3. Spanish ships find a New World:

Christopher Columbus and the Discovery of America:

The man—Christopher Columbus; Spain's interest in the finding of a new route to India; Columbus's first voyage (new islands); his later voyages (more coasts explored); Spanish settlements begun.

5. Spanish conquests in the New World:

The search for gold and silver; in the islands; in Mexico; the use of slaves.

6. French attempts at settlements in the New World and their failure.

7. Elizabethan England, and the English "sea-dogs":

Changes and progress of life of the times of "Good Queen Bess;" England on the seas—(Cabot should be recalled) Hawkins, Drake, Raleigh; jealousy of England and Spain; England's aid in the revolt of the Dutch against Spain; the Spanish armada—England becomes "Mistress of the seas."

8. Sir Walter Raleigh's attempts to plant colonies in the New World:

America in the literature of the time—Richard Hakluyt, his writings, their influence;—failure of Raleigh's colonizing efforts.

9. The situation in America; at the close of the 16th Century:

On the eve of English and French colonization.

WHERE TO FIND INFORMATION

Text for the Grade: Hall, *Our Ancestors in Europe.*

Read the section under the above title in the introductory article—"The Teaching of History in the Grammar Grades: Some Suggestions," pp. 473–500. Much will be found there of interest to teachers of the Sixth Grade. By far the most useful and convenient single volume for reference in connection with the course of the Sixth Grade is Robinson and Breasted, *Outlines of European History, Part I* (Ginn and Co., 1914, $1.50); this book presents a remarkably fresh study of ancient civilization, and one of the best brief accounts for the Middle Ages and the transition to modern times; it is written in a very attractive style and beautifully illustrated. A brief but well selected bibliography is given on pp. 697–712, which will serve all ordinary purposes. Attention may also be called to Allsopp, *An Introduction to English Industrial History* (imported by Macmillan; 60 cents); it gives in brief compass an admirably clear, concrete account of the story of industry and society in the Middle Ages and how the old conditions broke down, and contains a simple plan of a manor. For a specially helpful book on bibliographies for English history, see Cannon, *Reading References for English History* (Ginn & Co., 1910, $2.50);

Cross, *A History of England and Greater Britain* (Macmillan, 1914, $2.50), is the most recent comprehensive volume on English history; it contains selected reference lists by chapters, with annotations.

For the general field of modern European history consult the *Cambridge Modern History*, 12 vols. (Macmillan, 1900–1910, $4.00), it is a co-operative work, each volume containing from twenty to thirty separate chapters, written by nearly as many contributors.

A list of special books for children will be made during the year; it will be the outcome of classroom work and will include only the books that the teacher has found to prove successful with her pupils and that stand the test of historical accuracy and literary charm.

SEVENTH GRADE

The work of the Sixth, Seventh, and Eighth Grades should present one continuous story. The first part presents the European beginnings of American civilization, discloses how and why the new world was discovered by the old, and shows America as the heir of Europe. The teacher of the Seventh Grade should be thoroughly familiar with this background and make frequent use of it for comparative studies and for tracing lines of development. The second part of the story begins with the permanent settlement of the Atlantic coast by the English and their rivals, tells how and why these Europeans came here to live, what problems they had to meet, how the English obtained the mastery over all rivals, developed their industries and institutions and increased in numbers until they formed an American people, how this people broke away from the mother country to form a new nation, their problems in forming a new government, of their period of grave foreign entanglement, and of how they enlarged their territory and successfully built a new and distinctive nation. From this point the work of the Eighth Grade proceeds, and the teacher of the Seventh Grade should also be familiar with the rest of the story and realize that her work should contribute to an understanding of the later events and of the conditions and problems of the present time. The Committee of Eight makes 1783 the dividing point, but the one indicated here, about 1820, seems better because it carries the story to the establishment of a real nation, and allows more time for the study of recent history, which is one of the strongly marked tendencies in the teaching of history.

Read carefully and critically "The Teaching of History in the Grammar Grades: Some Suggestions," pp. 473–500.

For the study of Maryland history in the grade, see "Some Suggestions," pp. 494–494.

For a detailed plan for the teaching of Maryland history to the time of the royal governors see the 1908 Baltimore County course of

study [sixth grade], and also Strayer: *The Teaching Process*, pp. 183–195, which contains a plan worked out with page assignments from Gambrill's *Leading Events of Maryland History*.

Outlined in the large, the course covers the following topics:

I. How the Old World found the New.

II. Colonization: Europeans come to live on the Atlantic Coast of North America.

III. Formation of an American people.

IV. France and England fight for the mastery of North America.

V. Birth of a new nation: Thirteen English colonies establish the United States of America.

VI. The Problem of organizing a permanent union of States.

VII. The making of a new nation [1790–1825].

I. How the Old World found the New:

This topic should be briefly reviewed from the work of the preceding year, dealing with larger phases only and aiming especially to make the following points stand out:

1. The History of our country begins with the coming of Europeans.

2. During the 16th century Spain is the one successful nation in the west, finding vast quantities of gold and silver, exploring much of the interior of South America, Central America, and the southern part of North America, and building up a great colonial empire.

3. The rivals of Spain explored parts of the New World, chiefly coasts, and thus laid the basis for claims to land, but such attempts as they made to plant colonies failed completely.

4. The Commercial Revolution: the future of America was greatly influenced by the shifting of trade centers to the Atlantic coast of Europe, the formation of great chartered corporations, and the great increase in the world's supply of precious metals.

5. Geography of the North Atlantic world: the ocean highway, western Europe, eastern North America.

II. Colonization: Europeans come to live on the Atlantic Coast of North America.

1. Settlements at the opening of the 17th century:

At the opening of the 17th century the only European settlement on the Atlantic coast is the feeble colony of Spain in Florida. With the opening of this century the rivals of Spain, despite the jealousy of the latter, succeed in getting a foothold. Soon England, France, Holland, and Sweden successfully plant colonies on the Atlantic coast. A few years later England comes into possession of the Dutch and Swedish settlements; the two great rivals remaining are England and France, which fight for possessions in a series of wars during the next century.

2. Why these Europeans came to America, with special reference to the English.

3. Why the people who bore the expense of sending out settlers were willing to do so. Why the government gave encouragement.

4. How the settlers got to America; travel; ships and the voyage.

5. Difficulties and problems of the first settlers in a new colony; how they secured food, clothing, and tools; how they lived.

6. Why did the colonies, so feeble at first, grow in population, wealth, and comfort? Great migrations.

The foregoing topics may best be studied in this grade through specific topics—selected typical colonies, incidents, and persons. It is wasteful and ineffective to distribute the available time equally to all thirteen colonies; concentrate on more detailed studies of a few representative ones (but not failing to mention the others briefly), giving the most extended study to Maryland, as the home colony. (See pp. 494, 541.) Virginia, New York, Pennsylvania, and Massachusetts (including Plymouth and the Massachusetts Bay colony) are suggested. The study will extend to about 1690, but the idea is not so much to cover a particular chronological period, as it is to deal clearly with the planting and early history of the several colonies. With the six topics outlined in mind, the teacher will necessarily bring out such points as the motives of all concerned in planting a colony, terms of the grant, character of the settlers, how they were governed, climate and character of the country, industrial conditions, part played by religious ideas, relations with the Indians, leading men.

III. Formation of an American people:

1. Making of Americans:

The preceding section should bring out clearly how the colonies began, and show the progress of the new communities until they become firmly rooted. At first the people are simply Europeans in America, but with the lapse of years they think of America as home, their children and grandchildren regard this as their native land, and gradually an American people is formed. Their institutions, customs, and mental attitudes are necessarily based on those of the mother land, but inevitably they are modified, often to a great degree, by the conditions of the New World. By the middle of the 18th century such a change has unmistakably occurred, but it must be remembered that there is no American *nation* as yet, sentiment is still directed toward the *colony*, which now has its own history, traditions, and customs, while England is still looked to as the protecting Mother Country, distinguished from "foreign" countries by this relation as well as by the ties of language and blood kinship. This statement is of course made with reference to the Continental English colonies, the central object of study, but it applies generally to the tendencies of all new settlements in America.

2. Why the study of colonial Americans is important:

The study of these colonial Americans is important, because we cannot otherwise understand the Revolution that made them an independent nation, and because they and their immediate descendants are the people who built that nation and contributed the institutions and ideas from which so many conditions and modes of thinking in our time have developed. Yet generalizations like the foregoing cannot be presented profitably to children, no matter with what elaboration. They must be made to appear from the study of life among this colonial people, carried on very concretely.

3. Life in the English colonies in the 18th century:

This subject presents difficulties chiefly because sectional and local differences are in many particulars very marked, so that it seems as if several distinct peoples are being studied. Yet this very fact is one of the elements in the historical situation, and must stand out along with the other fact that there was much in common and many respects in which the differences were superficial or unimportant. Probably most teachers will handle the problem best by taking the three sections—New England, Middle, Southern, or type colonies in each, avoiding needless repetition and selecting some topics for general treatment where more convenient

The "back" country, with its frontier fringe, may be regarded in many ways as a separate section. The following summary may be suggestive of the ground to be covered:

a. The people, not neglecting the non-English immigrants, of whom the Scotch-Irish and Germans are most important. Others, such as the French and Dutch, were often important in particular localities.

b. Industries and occupations; classes of people; land, bringing out the ways of acquiring land, and the enormous importance of vast areas of cheap land.

c. The labor problem, and its fundamental importance in the development of the resources of a great new country. Reasons for the plan of "indentured servants" and slavery.

d. The home and the daily work: house, furniture, dishes, dress, implements, heat, and light, food, etc. The great differences here throw light both on social classes and on community progress.

e. Money and other means of exchange.

f. Commerce and shipping; shipbuilding, reasons and importance; relation of trade to other industries and British laws.

g. Religion and churches. Warring sects. Growth of toleration.

h. Education; schools and colleges; practical education in the home and daily work.

i. Intellectual conditions; superstition, notably the witchcraft delusion; treatment of disease; literature; newspapers.

j. Relations with the Indians; peculiar importance of the Iroquois.

k. Government: what the community needed to have its government do; legislature, governor, courts; voters; how laws were made and money collected and expended. In a simple, natural way it will appear that there were different types of colonial government—the corporate or self-governing, the royal province, and the proprietary province, the essential difference lying in the relation of the executive to the voters. (This will be needed later to explain why our state governments took the form they did.)

In teaching the topic great care should be taken not to get lost in a mass of details, possibly of more or less curious interest but devoid of significance. The definite purposes of the study should be kept in mind. Large general facts should by the close of the study stand out clearly and be full of meaning, e. g., the isolation of colonial life, the self-sufficiency of the community and even of the single farm or plantation (especially in frontier regions) as compared with modern conditions, the absence of the factory and of the use of machinery. It is also wise to note conditions that made for inter-colonial co-operation, cohesion, and those which worked in an opposite way; these can be brought together later for closer study in connection with the Revolution and the organization of a lasting Union.

4. Relations of the English colonies with Mother Country:

a. Government:

Here the problem of what was needed must be looked at from the point of view of the rulers of England; why colonies were desired, and what notions prevailed in Europe as to how they should be treated; some comparisons; which of the types of government found in the colonies would the English rulers prefer; how it would look to the colonists; friction with the governors, using actual cases; tendency to increase the number of royal provinces. (The people themselves usually preferred royal to proprietary government.) Board of Trade and Plantations; this topic will merge with the following topics:

b. Commercial and industrial relations:

The mercantile theory in its essentials can be quite simply explained for this grade. Desire of European countries to make their colonies profitable to the merchants and manufacturers of the mother country, sources of revenue to the government, and a means of promoting the growth of shipping and maritime enterprise. England on the whole more liberal than other nations, yet selfish and grasping as the colonists saw things. Simple outline of the chief British laws regulating shipping, commerce, and industry—always concretely. Lax enforcement of some laws. Respects in which they protected and aided colonists. Theory that the mother country paid for these advantages by giving to the colonies the protection of its navy and army against foreign nations.

IV. France and England fight for the mastery of North America.

1. Expansion of the French.

First settlements; wonderful explorations of traders and missionaries; claims established to the valleys of the St. Lawrence and Mississippi, the Great Lakes Region, and Hudson watershed.

2. Life in New France.

Vast territorial extent; scattering of population and the reasons; the fur trade, importance as an industry, adventurous and lawless life of the woodrangers; inter-marriage with the Indians, half-breed children, ability to get along well with savages; remarkable missionary efforts of the Jesuits and other Roman Catholic orders; the fisheries; farming, peasant class, landlords; importance of religion and influence of the church authorities, exclusion of dissenters and its effects; how the people were governed—no voters, even for neighborhood control, no meetings to discuss public business, absolute power of governor, intendant, and council; people of the settled communities inclined to be submissive and dependent.

3. Struggle between France and England.

As Spain declined England and France became the two great imperial Powers and rivals. (There was a short conflict between England and Holland, which had managed to seize the rich Portuguese possessions in Polynesia and was competing with England for the "carrying trade" even of the British empire itself, the fact which was responsible for the "Navigation Act" passed under Cromwell and made permanent in 1660; this fact will have been discussed in connection with the story of British colonial policies and can be referred to here.) It should be remembered that the fight over America was merely a phase in time and place, of a world-wide and long-continued struggle for dominant power. Mastery in the West Indies, possession of India, and the "balance of power" in Europe were involved, and were often of larger importance than America in the minds of the rulers of England and France. The concluding phase of this great struggle occurred in connection with the American Revolution, owing to the fact that France aided the rebellious colonies, and Spain and Holland also fought England. Although the American colonies became independent, England had firmly established herself as the leading colonial Power of the world. During this long struggle the great English "sea power" had been built up. While all this cannot be fully studied in the Seventh Grade, enough should be done in a simple way to show the setting of the American conflicts.

4. Struggle for possession of North America: first phase.

This extends to 1764. Recall a few minor clashes and conflicting claims prior to 1689; in the latter year began the series of four intercolonial wars that ended with the expulsion of French power. These wars, which have been commonly

referred to by the name of the reigning English sovereign or, in the case of the last, as the French and Indian War, might well be designated by number—first, second, etc. The first three are distinctly different from the fourth; the latter began in America when the expanding English colonists clashed with the French, the others began in Europe over other questions, and were taken up incidentally in America. The fighting was to a great extent raiding with Indian allies, though some important attacks on New France were made. The first and third did not alter the situation in America, the second resulted in important gains fo territory by England. They all illustrate the part played by the Indians and the special importance of the Iroquois (which is true of the fourth war also), and the work of Sir William Johnson might well receive some attention, especially as it will be very interesting to the children. There is no need for a detailed study of these wars; enough should be done to bring out the points above mentioned, and to indicate their influence in promoting intercolonial co-operation.

5. Final struggle for the possession of North America, 1754–1763.

a. Conditions leading to armed conflicts in the Ohio valley. When the westward extension of the English settlers carried them across the mountains, a clash was inevitable.

b. The great work of William Pitt as prime minister of England, following a period of failure.

c. *The French and Indian War:*

Not much time should be put on the actual fighting. An interesting study of the geographical conditions may be made, to show the points of contact and military problems, and indicate where the battles would have to occur. The relative advantages and resources of the two sides may be compared. The crowning victory of the war at Quebec, because of its importance and picturesque interest, might be made the one battle study.

d. Treaty of Paris (1763): terms of the peace.

Franklin, Jay, and Adams, the American negotiators.

e. Results of the sweeping victory of Great Britain.

These were of the highest importance. The weakness of England's control over her colonies was revealed by the wars; thus pointing out the need of those changes which were soon attempted with the effect of precipitating the Revolution; the colonists received military experience, developed their confidence and self-reliance, and learned to co-operate with one another; the removal of the French menace made England less afraid to offend the colonists and the latter feel less need of protection; determined the ultimate character of American civilization—English ideas and institutions instead of French or a division. All this the teacher should have clearly in mind, but it would be a mistake to elaborate or harp on them with the young student at this point; they can be developed here so far as proves easy and natural, and driven home later, from time to time, in connection with the appropriate developments.

V. Birth of a new nation: Thirteen English colonies establish the United States of America.

1. The British Empire: Great Britain and her possessions in all parts of the world.

a. Importance of the West Indies and of India.

b. The Continental American colonies—review briefly the relations with the Mother Country, political and commercial.

c. Weaknesses in the imperial organization exposed by the French wars: impossibility of mobilizing the real military strength of the colonies; ineffective-

ness of "requisitions;" illegal and treasonable trade of colonists with the enemy. Recall the necessary facts from the study of the last war to illustrate these facts in a simple, concrete way.

2. New plans for strengthening the Empire are proposed by the English Government:

a. Strict enforcement of the acts of navigation and trade.

b. Keeping a standing army in the colonies.

c. Strengthening the governors by paying their salaries instead of leaving them dependent on the Assemblies representing the voters.

d. Direct taxation by act of Parliament, to help pay the expenses of governing and protecting the colonies.

3. How England tried to put the new plans into effect, and what the colonists did about it:

It must be remembered that the features of the new policy were not all proposed at once or by one person, but appeared in the course of several years, and involved the general idea and purpose of imposing a stricter control over the colonies.

a. Writs of assistance, 1761; why they seemed necessary if the Acts of Trade were to be enforced; why they were so objectionable to the colonists; James Otis.

b. The "Parson's Cause" to introduce Patrick Henry and the feeling of resentment which he expressed against British interference with laws passed by the colonial assemblies.

c. The Sugar Act, 1764; the preamble expressly declares the intention of Parliament to cause a stricter enforcement of the laws of trade, and to raise money "towards defraying the expenses of defending, protecting, and securing the said colonies." (For serious effects in New England, see Coman, *Industrial History of the United States*, pp. 92ff.) Strong protests.

d. The Stamp Act, 1765; provisions and purpose. How the colonists prevented the enforcement of the Act; mob violence; Sons of Liberty; organized opposition, especially the Stamp Act Congress and its Declaration of Rights. Attitude of Pitt. Repeal; Declaratory Act.

e. The Townshend Acts, 1767; provisions; protests and resistance. The taxes, except that on tea, repealed in April, 1770.

f. Growth of the Revolutionary movement; boycott agreements; troops sent to Boston; the "Boston Massacre" (March, 1770); attitude of King George III, his minister, Lord North; Gaspee destroyed, 1772; committees of correspondence; "Boston Tea Party," 1773, similar acts against the tea tax in Annapolis, Charleston, and other cities.

g. Repressive Acts passed by the British Government, 1774. Boston Port Bill, Massachusetts Charter Act; Impartial Justice Act, Quartering Act. Response of the colonies; general support of Massachusetts.

h. The Quebec Act, June, 1774. Resentment against the Act on religious grounds and because of desire for the western lands. Refer to the proclamation of 1763, setting aside the country west of the mountains for the Indians, and the grounds of colonial objection.

4. Patriots and Loyalists: the Revolution as a civil war. Whigs and Tories in England.

5. Organizing the Revolution: growth of Union.

Local revolutionary bodies; committees of correspondence; First Continental Congress (Sept. 5, 1774), and its work, especially the declaration of rights, "Association," address to the people of Great Britain, and petition to the king; armed conflicts, Lexington and Concord (April 19), Bunker Hill (June 17), 1775; Second Continental Congress, May 10, 1775, makes itself a provisional government to carry on the contest. Declaration of the causes of taking up arms by Congress, and the proclamation of rebellion by the king, August 23, amounted to official declarations of war.

6. Independence.

Growth of bitterness; failure of attempts at reconciliation; Paine's Common Sense; radicals against conservatives, the former win. Story of the Declaration; analysis of the document.

7. Why the Revolution occurred: a study of fundamental causes.

a. Spirit of freedom and independence: very strong among the ruling classes. Many of these who came to the colonies were radicals, dissenters, or people of more than usual enterprise and self-reliance. Such qualities were developed by the struggle with the wilderness. Being 3,000 miles away from England, with the ocean between, and being allowed so much freedom by England, they naturally came to have a strong desire for their own way.

b. The colonies had not developed representative democracies like those of today, but they had gone much further in that direction than the English had done; they had the idea that every man of adequate property ought to vote, and that every important community should be represented in the legislature, while in England there were large cities that sent no members to Parliament, and the laws about voting were confused and unfair. "Representation" did not mean the same thing in both countries.

c. England had never worked out any orderly plan of empire, never passed any series of laws clearly defining the relations of the colonial governments to that of England. These circumstances made a quarrel likely in the end. More and more the colonists came to want self-government. When England tried to make a stronger empire, with stricter control by the Mother Country, the clash came.

d. Why did the break occur when it did? Rapid growth in wealth and numbers in the 18th century (population increased more than one-third every decade from 1720–1770). Successful conclusion of French wars brought matters to a crisis. Some shrewd observers had predicted that if the French were expelled the colonies would revolt.

e. The break did not come over mere abstract principles of government, but in connection with very substantial economic interests that affected large numbers of people.

It would be a mistake to begin the study of the Revolution with a long study of causes, and even at this point it would be useless to dictate such statements as the foregoing. An appreciation of these points should be made to grow simply out of the study of the course of events and by recalling what is known of the colonial period. Pupils should be encouraged to summarize the results in an individual way.

8. The war for independence.

It is common to spend entirely too much time on the military history of the war; no detailed study of the fighting is necessary, though the student may be encouraged to read more about it himself. The following topics are suggested and the part of Maryland should receive attention.

a. Compare the problems and advantages of the two sides: geographical study to get at the plans of campaign, population, military and naval forces, industries, which had advantage of strong government, transportation problems, the loyalists.

b. Conditions in the American army; life of the private.

c. Outline of the several plans of the British for conquering the country: first and second campaigns for the Hudson valley; against Philadelphia; for the conquest of the South. Valley Forge and why such conditions could exist. Fighting in the West. One or two battles might be studied as types, e. g., Brandywine, Cowpens.

d. The French alliance and its importance.

e. Fighting at sea; John Paul Jones. France, Spain, and Holland against England.

f. Industrial conditions during the war.

g. Problem of paying for the war: "requisitions," loans, paper money, unpaid soldiers; Robert Morris.

9. Results of the war.

a. Treaty of Paris: short study of the work of the American envoys and their problem; terms of the peace.

b. Full opportunity for the American people to make of themselves what they could. A strong and lasting influence in other parts of the world (see suggestion under "Results" of French wars).

VI. The Problem of organizing a permanent union of the States.

1. The United States of America.

a. Political problems created by independence: need of forming state governments to replace the colonial, and a general government to replace the imperial.

b. *How the state governments were formed and what they were like:* conventions; departments and officials, powers and duties; compare with colonial governments, bringing out close resemblances and reasons for the differences.

c. *General government.* When the Second Continental Congress assembled in May, 1775, armed conflicts had already occurred at Lexington and Concord, and a few weeks later occurred the battle of Bunker Hill. Confronted by actual war, which must be directed by some general authority to have any chance of success, the Congress, as the only body representative of all the colonies, assumed the powers of a *provisional government*, an intermediate step which must be taken in every revolution. To provide for a permanent constitutional government, the Congress drafted Articles of Confederation and submitted them to the states for ratification (1777). These finally adopted in 1781. Delay due chiefly to the position of Maryland about the western lands (See Gambrill: *Leading Facts in Maryland History*, pp. 135–137).

2. The Confederation was the first constitutional union. It was the first attempt to solve their problem of federal union, of wisely dividing the powers of government between the states and the general government. What was the plan? Brief outline of the organization and powers it could exercise as a basis for studying the actual workings.

3. How did the country get along under the Articles of Confederation?

a. Commerce, foreign relations, taxes, disorder, interstate quarrels, etc. The story of this "critical period" will yield a summary of thee chief defects of the Articles, i.e., the respects in which th government lacked power to do things

of common concern that needed to be done for the whole country, and the respects in which it could not really do the things it was supposed to have power to do.

b. The west; conflicting claims of the states, service of Maryland to the Union; Ordinance of 1787, the start of territorial government.

4. Why did the Americans fail so badly in the first effort to solve the problem of federal union?

Their previous history gives the answer. The Revolution was fought by colonies that wished to control their own affairs, especially commerce and taxation, through their own assemblies; naturally they wished to give up as little power as possible to a central government. Looking at the situation this way pupils can see how certain they would be to make the mistake at first of giving the general government too little power for the general good.

5. The Federal Convention of 1787.

a. Why and how called. Classes of people who would especially suffer from the feebleness of the Confederation government; interests of the creditors of the government and business men who suffered from the bad commercial conditions and "hard times." Washington, Hamilton, and others who led the demand for a stronger government.

b. Problems of the Convention and the work it did. The mistakes of the Articles must be avoided, but how? Large state men inclined to be nationalist, those from small states to insist upon "state's rights." Sectional antagonisms, North and South, East and West. Doubtful extent of Convention's power. Principal plans that were proposed; compromises. Practical character of the work; built very largely on experience of colonies and states and Confederation, and knowledge of English experience. Men who were leaders in the work. Secret meetings and the reason.

6. The Constitution:

Outline of the chief provisions, showing how weaknesses of the Articles were corrected; did not attempt to regulate details, compare with state constitution of our own time. The great, vital peculiarity is the plan of having every citizen directly subject to and served by *two different* governments, each responsible for a different field of authority and activity; e.g., control of the commerce with foreign nations belongs to the Federal government, control of education and protection of the citizen from violence belong to the state. A few powers essential to any government, notably taxation, may be exercised by either, and are thus "concurrent." It is not advisable to undertake an elaborate study of the Constitution at this point; consider the broad fundamental features, and why they were included. The actual working of the national government—regulating commerce, making treaties, the procedure in passing a law, admitting a new state, etc., can be studied in the concrete cases that will come into the story of the country's progress to the present time.

7. The new Constitution adopted by the States:

Nine states needed; ratifying through conventions; arguments advanced for and against ratification. The study of one or two states where the struggle was serious (e.g., Massachusetts, New York, Virginia) will perhaps be the best way of treating the topic. Virtual promise of the leaders in the fight for adoption of a Bill of Rights to be added by amendment. Final adoption. Reference to the peculiar position of Rhode Island and North Carolina. Maryland's part.

VII. The Making of a new nation:

1. The people of the new nation:

a. Census of 1790; total population, different elements. Consider *distribution;* proportion of rural and urban, number and size of cities, only 5% west of mountains, etc.

b. Conditions of life not much changed since middle of 18th century; brief review with some modifications will serve to introduce the national period. Immigration very small between the eve of the Revolution and 1820.

c. Some characteristic American attitudes of mind were developed or stimulated by the war and the launching of the national government: pride in the size and resources of the country, great faith in its future, enthusiasm for "liberty" and democracy. But restrictions on the suffrage were still common, and property qualifications for holding important offices were usually high. (Ch. of Bassett, *The Federalist System,* reprinted in Hart, *Social and Economic Forces in American History,* is very helpful for the general topic.)

2. Putting the new government into operation:

a. First election; president and vice president; Congress and its organization; the inauguration of the president.

c. Organizing the three departments: Congress, officers and rules for conducting business; judges, clerks, and marshals for the courts; heads of executive departments to assist the president. Appointments by the president to fill the offices created. How the "cabinet" began.

c. Some necessary laws: providing for coinage and money, taxes to get funds to run the government (tariff and excise). Providing for the debts of the Union, conducting a post office system, choosing the capital. Influence of Hamilton in planning measures to establish the credit of the nation.

d. Adding a bill of rights to the Constitution: first ten amendments.

e. Importance of getting things started right (precedent), and of wise, firm administration. Significance of the Whisky Rebellion. Washington as a statesman; his special fitness to be the first president; his Farewell Address.

3. Relations with foreign countries:

a. France—The French Revolution. War between France and England; questions raised in the United States, and differences of opinion. Genet.

b. England—Violations of the treaty of 1783 on both sides; controversies over the rights of neutral trade; no minister from England (until 1791). Attempts to adjust matters; the Jay treaty.

c. Spain—boundaries; question of navigation of the Mississippi; commerce. Treaty of 1795.

d. Continued trouble with France. French resentment at Jay treaty and refusal of U. S. to aid them; treatment of our commissioners; X. Y. Z. affair. Remember that the anti-French party controlled the American Government at this time. Congress abrogates the treaty of alliance (of 1778), July, 1798. Fighting at sea, 1798–1800.

4. Beginnings of political parties and party strife:

a. Show how in a democracy differences of opinion about the nature and policy of the government are sure to arise, and become the basis of parties; refer to Patriots or Whigs, and Loyalists or Tories, during the Revolution; Federalists and Anti-federalists in connection with the movement for a stronger central authority that culminated in the adoption of the Constitution.

b. Show how differences of opinion grew out of the many problems connected with putting the new government into operation" and in connection with "Relations with foreign countries" (see sections 2 and 3, division VII). The opposing leaders, Hamilton and Jefferson.

c. The Federalists favored: a strong national government, therefore a broad or loose interpretation of the Constitution, a large national debt so as to keep prosperous citizens interested in the success of the new Union, dignified forms and ceremonies; government aid to promote business prosperity, e.g., by a national bank and "protective" tariffs; strong army and navy; control of government by men of property and education; friendly relations with England.

d. The Republicans (called "democrats" in derision by their enemies, sometimes spoken of as "Democratic-Republicans"; must be carefully distinguished from the later Republican party). They were the party in opposition to those in power, and stood for: strong state governments, with a minimum of power for the central government, therefore favored strict "construction" or interpretation of the Constitution, opposed the assumption of state debts and violently objected to such policies as the creation of a national bank, dreaded a strong army and navy. They believed that the masses of the people, not a select few, should control. Favored agricultural interests instead of the mercantile, fearing the "money power." Very friendly toward France and the French revolutionists.

5. Period of Federalist control:

a. Washington had little spirit of partisanship, but usually favored the views of his Federalist advisers; his dependence on Hamilton; resignation of Jefferson. Federalists clearly dominant during Washington's second term; violent attacks on him by partisan newspapers; he declines a third term—the beginning of a custom; the Farewell Address.

b. John Adams elected in 1796 after a party contest; violence of party strife during his administration; naturalization, alien, and sedition acts; Virginia and Kentucky Resolutions.

c. Overthrow of the Federalists in the election of 1800; the change as a "political revolution."

6. *Period of Republican Control:*

a. Jefferson, the great leader of the new regime. Recall his earlier career, already familiar; private life; personal characteristics; views on public questions; his services in Virginia. Madison, secretary of state (recall his earlier career), Gallatin, secretary of the treasury: the two ablest helpers.

b. Some acts of the new administration that carry out the party policies, e.g., simple inauguration, with reference to the debt, army, and navy; repeal of excise, repeal of naturalization act and passage of more liberal one, repeal of judiciary act.

c. The Republicans continued in control until after the Federalists had gone to pieces, the latter failing to nominate a candidate against Monroe in 1820. Thereafter a reorganization of parties occurs, and in the following decade the Democrats and Whigs appear. The Republican regime thus lasts throughout the remainder of the seventh grade course, but with important changes in its own character. At this point it is enough to launch the party on its career; as the changes occur they may be noted and at the end summarized.

7. Territorial expansion: doubling the area of the country.

a. Importance to the West of free navigation of the Mississippi and the port of New Orleans. Recall troubles with Spain; "right of deposit" secured.

Alarm in U. S. when port is again closed, after news that Louisiana had been ceded to France. Jefferson sends envoys to try to buy the island of Orleans and the Floridas.

b. Recall briefly the previous history of Louisiana; explored and held by France, which lost it in 1763, the eastern part of the Mississippi basin to England, whence it passed to the U. S. in 1783, the western part to Spain. Napoleon gets it back.

c. Napoleon offers to sell the whole of Louisiana to the U. S., and the envoys accept. Terms: price, area and undefined boundaries, rights promised inhabitants, etc. President and Senate ratify the treaty; House appropriates money. Constitutional question, inconsistency of Republicans.

d. Great importance of the annexation of Louisiana: vast area and resources; certain to increase influence of West—jealousy of New England; future connection with slavery and influence on immigration, forces Republicans to commit themselves to broad construction. (This is another case in which it is useless to memorize "results;" develop lightly here, as far as intelligible, letting the understanding grow as things happen later.)

e. Reaching out for Oregon.—Lewis and Clark explorations, information gained about the new territory, new claims on Oregon. Mention of claims by Spain, England, Russia, reserving for fuller study later.

f. Desire for the Floridas: brief reference to reasons for interest, claims and disputes, avoiding confusing details. Cession to the United States by treaty of 1819.

8. Napoleon and the great wars in Europe.

Emphasizing the prolonged and desperate character of the struggle, and disposition of the belligerent nations to disregard the rights of neutrals. Interesting comparisons may be made with the Great War of 1914.

9. The United States and the Napoleonic wars: struggle for the rights of neutrals.

(Notice the close parallel in many respects with the Great War of 1914—in issues raised, entanglement of the U. S., industrial effects, etc.)

a. How the war creates a great demand for American foodstuffs, causes a rapid increase of American shipping and carrying trade. Figures, especially if indicated on graph, can be very effectively used to show the effects of the war in its various phases (figures in Day, *History of Commerce*, p. 489, graph in Ashley, *American History*, p. 258).

b. Desperate efforts of England and France (decrees and orders in council) to injure each other commercially, seriously affect American trade. Ruinous result of measures pushed through by Jefferson to punish England and France, the Embargo (1807); this followed by Non-intercourse and Macon Bill No. 2.

c. Important questions raised regarding the rights of neutrals, and contentions of the U. S. for the freedom of the sea: Is a "paper blockade" binding? Is food contraband? Do "free ships make free goods?" Question of "continuous" and "broken" voyage. Right of search. These may be handled very simply and concretely.

d. Impressment of American seamen by British warships: desertions from British navy to American merchant marine; question of naturalization; high handed practices of British naval officers; Leopard-Chesapeake outrage and popular demand for war.

e. Jefferson's peace policy; opposed to war; believed nations could be influenced by "reason" and "interest." Resorts to delay and economic warfare, opposes strengthening of navy and army.

f. Drifting toward war: American grievances against both belligerents but England, in control of the seas, had much greater opportunities to inflict injury. Growing bitterness. Congressional elections of 1810 bring in numbers of "Young Republicans," eager for war; their leader, Henry Clay, supported by John C. Calhoun. The "President and the 'Little Belt.' "

10. War with England, 1812–1815: Fighting for the freedom of the seas.

a. The declaration of war and its statement of grievances.

b. The U. S. unprepared for war; England preoccupied in Europe. Comparison of the two in resources and advantages. The military problems; importance of naval power. American mistakes and mismanagement.

c. New England's resentment and opposition to the war.

d. Brief study of the general aspects of the military and naval side of the war: attempts to invade Canada; fighting at sea and victory of single American ships; blockade of the coast, part of the privateers; battle on the lakes; British invasions of 1814—capture of Washington, attack on Baltimore and the Star-spangled Banner, battle of New Orleans and Jackson.

e. Treaty of peace (Ghent, 1814); important questions not formally settled.

f. Results of the war: international—on standing of U. S. and rights of neutrals; in the U. S.—fostered national spirit, led to final downfall of Federalists, developed nationalist tendencies of the Republicans, which adopted many of former Federalist policies, increased national debt, checked foreign commerce and promoted manufactures. (See suggestions under "Results" of Revolution.)

11. Growth of the West (to about 1820).

a. Country west of the mountains: geography and resources, opportunities for settlers, public land laws; importance of the transportation problem, influence of steamboat.

b. Rapid influx of people from the East, the moving frontier line; conditions of frontier life (compare with early colonial settlements), qualities of character and social and political ideals that were fostered.

c. Admission of new states to the sisterhood of the Union, 1791–1820. This may fairly include Vermont, for the western parts of the older Eastern states must be considered in many ways as western in character and influence. The new states alter the weight and influence of older sections, such as New England; western ideas play a large part in the public life of the nation.

d. Typical leaders of the new West: Henry Clay, Andrew Jackson.

e. Consider again the importance of the annexation of Louisiana in the light of the preceding topics of this section.

12. Invention, Industry, and Transportation.

a. At the beginning of the Republic: country agricultural (crude methods) and commercial (taking our agricultural products abroad, bringing manufactured goods and luxuries from abroad); primitive conditions of travel; absence of machinery and use of steam or electricity; methods of manufacture.

b. Effect of the European wars is first to increase the devotion to agriculture and shipping, then to divert effort and capital to manufactures, which continue to grow after the War of 1812.

c. In England machines are invented for spinning, weaving, carding, and the other textile processes and the steam engine is developed and made to drive this machinery; in America the cotton gin is invented. These changes create a vastly larger demand for cotton, the production of which soon becomes

the leading industry of the South; and after a time the new machinery and engines are introduced in the North, especially in New England, the factory system begins, and American manufactures become increasingly important.

d. Building of a successful steamboat by Robert Fulton; great importance in building up the West and promoting internal development. Building of canals and good roads; aid given by the states, the question of Federal aid. Reference should be made to the building of railroads a few years later.

13. The institution of slavery and its sectional tendencies.

a. Northern states, in which slavery was not profitable, provide for its abolition, 1777–1784. Provision in the Ordnance of 1787. Recognition of a sectional division—Mason and Dixon's line.

b. Early national legislation: the fugitive slave act of 1793; act abolishing foreign slave trade (1807, in effect Jan. 1, 1808), co-operation with England in trying to break it up.

c. Early abolition discussion, non-sectional; the colonization movement (1816–), Liberia

d. The Missouri question and the Compromise of 1820.—Rapid growth of the West raises the question of the status of slavery in the Louisiana territory; the different problems raised, the fight in Congress, provisions of the compromise and the principle on which based Results.

14. Growth of national spirit.

a. The Republican party becomes nationalized: Recall the series of events showing this tendency—e.g., Louisiana Purchase, Embargo Act, war measures and other laws based on "implied powers," broad construction. Climax reached in passage of laws (1816) for protective tariff and second Bank of the U. S., marking complete reversal of early position. Influence of "Young Republicans."

b. Foreign relations.

The attitude of the Congress of 1811 clearly showed the rise of a new spirit of national self-respect, resentment against the aggressions of foreign nations; also a sentiment for conquest and expansion. Effects of the war and the economic independence that followed it. Adjusting the national boundaries: British treaty of 1818 (line of 49°, Oregon); Spanish treaty of 1819 (Florida, Louisiana line, gives up Oregon north of 42°); Russian treaty of 1824 (abandons claims south of 54° 40′). The Monroe Doctrine (1823): conditions in Europe; conditions in Latin America; England's proposal; Monroe and J. Q. Adams; principles laid down—U. S. would consider it unfriendly for European powers to attempt to interfere with independence of American republics, plant new colonies in America, or establish monarchical system in America; U. S. not to interfere in European affairs. Great importance; reference may be made to later application, especially French in Mexico, 1861–66, and Venezuela boundary in 1895.

c. Decisions of the Federal Supreme Court about the meaning of the Constitution; Chief Justice John Marshall. Important as this question is, the attempt to deal with it in general terms is worse than useless. Select a few typical, important cases and study them in enough detail to arouse interest and show just what the Court did and why it was important. The following are suggested: McCulloch vs. Maryland (1819), for doctrine of implied powers and broad construction; Martin vs. Hunter's Lessee, declaring a state law unconstitutional; Cohens vs. Virginia (1821), holding right of appeal from state supreme court to Federal courts; Dartmouth College case (1819), states cannot impair obligation

of contracts; Gibbons vs. Ogden (1824), regulation of commerce. The greatest pains should be taken to present these simply and apply them to familiar things; for example, it might be shown how the Dartmouth College decision limits the power of Maryland to tax the Baltimore and Ohio railroad.

d. Nationalizing influence of the West.—Apparent from the study of the topic as outlined (Topic 11).

e. Beginnings of American literature.

The French Revolution and Napoleon

N. B.—The Course of Study of 1909 included a study of The French Revolution because it was believed at that time that we should study the two great revolutions side by side. For the first time in the history of mankind the idea of manhood suffrage was revealed by the French Revolution. The revision committee in 1915 felt that because the course in American history might become too heavy, it would probably be just as well to omit the French Revolution. It was decided, however, to print the outline leaving it to the individual teacher to settle for himself whether he should include it in his schedule. Now, in 1918, when twenty-two nations of the world are allied to fight against German autocracy it seems very necessary and vital to include more European history in our curriculum. The seventh grade teachers are therefore urged to teach the French Revolution, not in detail as a war, but correctly developing the principles it establishes—"liberty, equality, fraternity."

I. How the People of Europe Lived in the Eighteenth Century (France the center of the study).

1. Work, trade, and social classes.

a. Tilling the soil; very crude methods that were used; the manor-life of the peasants; serfdom and the survival of the old servile dues and disabilities.

b. Manufacture and commerce; the towns and the system of guilds; government restrictions on industry and commerce; position of the "middle class" or *bourgeoisie*.

c. The three "estates."

(1) Privileged classes—clergy and nobility; special privileges and monopolies.

(2) "Third Estate" comprising the vast majority of the people; the real mass of the nation; restrictions and discriminations under which they suffered.

(3) Important differences within each of the "estates:" within the third estate, between the peasants and workers on the one hand and the *bourgeoisie* (wealthy or well-to-do middle class) on the other; the poorer clergy, distinctions among the nobles. *Privilege* the real key to class differences, which often cut across the lines of the "estates."

2. Science and attitudes of mind.

a. Spirit of scientific study instead of dependence on authority; spirit of progress and reform.

b. Francis Bacon had prepared the way; Newton; academies and institutions for scientific study.

c. Advocates of social and political reform; Voltaire; writers for the Encyclopedia; Rousseau; attacks on religious privilege and intolerance; the Italian, Cesare Beccaria, in his treatise on *Crimes and Punishments*, attacks the cruel and unjust methods of dealing with persons accused of crime.

3. How people were governed.

a. Autocratic or class rule prevails, even in England.

b. Conditions in the French monarchy; absolute power of the king; confusion and unfairness in laws and administration; special privilege; extravagance and abuses of the court; Louis XV and "After us the deluge."

c. The "enlightened despots" and their ideas: Frederick II of Prussia, Catherine II of Russia, Joseph II of Austria.

II. Efforts for Reform in France Under Louis XVI.

1. Critical character of the times.

2. Character of the king; his good intentions, his weakness and dullness. Character of the queen and her unfortunate influence.

3. Serious financial difficulties; efforts of Turgot and Necker.

4. Burden of aid extended to the rebellious American colonies.

5. Meeting of the Estates General; some of its leading members; the *cahiers* and free expression of grievances; supremacy of the *bourgeoisie* element of the third estate; the "tennis court oath."

6. Organization of the National Guard, 1789.

7. Riots among the people; destruction of the Bastille.

8. The National Assembly; and end of absolute government.

III. France a Limited Monarchy: the Revolution to 1792.

1. Making an end of the *ancient régime* (the old order of things.)

a. Demand for liberty and equality; Declaration of the Rights of Man.

b. Reforming the government; beginnings of a constitution.

c. Seizing church property; bringing the clergy under civil control; general attack on privilege; flight of many of the nobles and clergy.

d. Constitution of 1791: king, ministry, legislative assembly.

2. The city of Paris and its influence: the commune; influence over the king and the assembly; clubs, newspapers, pamphlets.

3. Troubles and downfall of the new monarchy.

a. Blunders and attempted flight of the king.

b. How the Assembly conducted its business; factions and their quarrels; the clubs.

c. France and her neighbors; interference of foreign monarchs; outbreak of war (1792); the uprising of August 10, 1792; king suspended.

IV. The First French Republic (1792–1804).

1. The new and more radical revolution; work of the National Convention.

2. Monarchy abolished and the king beheaded; France a republic.

3. The "Reign of Terror;" Committees of Public Safety; influence of the pressing danger of foreign invasion.

4. Fortunes of the war with foreign states.

5. Robespierre, his rise to power and downfall.

6. The "rabble" and their hatred of the *bourgeoisie*.

7. Reforms undertaken by the Convention. Constitution of the Year III.

8. Government of the Directory (1795–1799).

a. A period of wars.

b. Bad government and disasters.

9. The republic changes into a military dictatorship.

a. Napoleon Bonaparte; his early life and rise to high command in the army of the French Republic; his campaigns in northern Italy (1796-97).

b. Overthrow of the Directory; the Consulate, with Napoleon at the head; change ratified by popular vote; success in war; sale of Louisiana to the United States.

V. The First French Empire.

1. A new monarchy, with court and nobility, and censorship of the press, but free of many of the evils of the "old regime."

2. The long series of foreign wars; Napoleon's wonderful victories; expansion of the empire.

3. End of the "Holy Roman Empire;" beginning of the empire of Austria. Prussia defeated and humiliated.

4. England the determined leader of opposition to Napoleon; their attempts to injure each other's trade and industries by "decrees" and "orders in council" seriously injured the shipping interests of the U. S.; war between England and the U. S. (1812–1815).

5. The emperor's troubles in Spain; the terrible Russian campaign of 1812; the defeat in the battle of Leipzig (1813).

6. Abdiction of Napoleon; Elba and the "Hundred Days;" battle of Waterloo (1815); exile to St. Helena.

7. Napoleon's influence in spreading results of French Revolution; his improvements in France; public works; legal codes.

REFERENCES: Robinson and Beard, *Development of Modern Europe*, Vol. I, Ginn, $1.50, very valuable material in *Readings in Modern European History* by same authors; Mathews, *The French Revolution*, Longmans, $1.50; Lowell, *Eve of the French Revolution*, Houghton Mifflin, $2.00; *Arthur Young's Travels in France in 1789*, well printed and bound, may be had at 35 cents in either the Everyman Series, Dutton, or the new Bohn Library, Macmillan; Johnston, *Napoleon Bonaparte*, Holt, $1.25; Adams, *Growth of the French Nation*, Macmillan, $1.25.

EIGHTH GRADE

The work of this grade is continuous with that of the Seventh; read the remarks at the beginning of the course for the Seventh Grade. *The numbering of the main topics for the two grades is unbroken, to indicate this continuity.* [Grade VII, Topics I–VII inclusive, Grade VIII, Topics VIII–XV inclusive.] Naturally the work of the Eighth Grade will begin with a review but this should be brief, informal, and devoted only to the largest topics, so as to secure the right point of departure. As particular topics, such as slavery and political parties, are taken up they should be introduced by such specific reviews as may be necessary to intelligent study.

Here we are working up directly to our own times, and every effort should be made to give the story practical interest, to throw light on the conditions and problems of our country today by showing how they came to be.

Read carefully and critically "The Teaching of History in the Grammar Grades: Some Suggestions," pp. 473–500.

For the study of the history of Maryland in this grade, see "Teaching History in the Grammar Grades: Some suggestions," pp. 494–495.

Outlined in the large, the course covers the following topics. (The numbering is continued from the Seventh Grade outline.)

VIII. The Industrial Revolution and the Transformation of Society.
IX. Industrial Reorganization in the United States.
X. Political Re-organization and the Growth of Democracy.
XI. Development of American Society, 1820–1860.
XII. Nationalism or Sectionalism?
XIII. Crisis of the Union: One Nation or Two?
XIX. The New Union.
XV. Our Own Time and Its Problems.

VIII. The Industrial Revolution and the Transformation of Society.

1. Coming of the Age of Machinery.

This means in brief the coming of the age of machinery and the application of science to industry and common things, with the corresponding changes in society. It has fairly made the world over, and may be rated at least equal in importance to any other great change in all history. No one can really understand the world today without knowing something about the Industrial Revolution.

2. Textile manufacturers in England.

The change began in England in the second half of the 18th century, with the inventions of Hargreaves, Arkwright, Crompton, Cartwright, Watt, and others. These made possible the carrying on of textile manufacturers by machinery driven by steam and water power, instead of by the crude methods of hand carding, the spinning wheel, and the hand loom.

3. The progress of the Revolution:

The progress of the Revolution is best studied by showing how the working out of the early changes mentioned would force others. To get machines and fuel, the coal and iron industries must be improved and developed; the need of machines to make machines would develop new industries; better instruments for testing temperatures, weight, measures, etc. would be required; the enormous value of motive power leads in time to applications of electricity and the gas engine; larger supplies of raw materials are needed and more food for the cities that spring up, hence improvements in agriculture, the use of machinery, more scientific methods; vast increase in commerce and business demands similar improvement in transportation and communication—steamboat, locomotive and railroad, electric cars, telegraph, telephone, wireless, improved postal service.

4. Economic and social changes.

Much larger capital needed for the new industry and commerce; growth of corporations, and in time the trust problem. Vast increase in wage-earning class, because workers can no longer own tools and market the product; their dependence on capitalist employers, struggle for organization, conflicts; new class consciousness; socialism. Communities cease to be isolated in the old sense. Crowding to industrial centers; growth of great cities; new problems in social reform. New problems in education. Power-driven machinery and new means of communication make possible the modern newspaper and magazine.

NOTE: The foregoing paragraphs are bare suggestion of this great change and the lines on which it may be studied. Though commonly neglected in schools, they are as much a part of history as kings and wars, and much more important.

5. England becomes the leading industrial and commercial nation of the World.

England got the start in the Industrial Revolution and for a time managed to keep the secret of the new machines. Thus she became immensely wealthy and began her real career as the leading industrial and commercial nation. All Napoleon's decrees could not keep English goods out of the Continent, because they were better and cheaper. But after a time the new methods were of course adopted on the Continent, and society was there transformed in the same way with all the accompanying problems. We can now appreciate much better the changes that occurred in the U. S.

IX. Industrial Reorganization in the United States:

1. The story of American industry.

Carefully review the story of American industry from 1789 to 1816 (Topics under VII, especially 9, a–f, and 12). It will then appear that a strong tendency to develop manufactures developed in the United States just as the Industrial Revolution got well launched in England.

2. Beginnings in the use of machinery and power in the U. S.; evading the English restrictions.

Samuel Slater, "father of American manufactures," with only his memory of the English factories to guide him, sets up the new cotton machinery at Pawtucket, R. I. about 1790. Yet in 1804 we had only four cotton factories, and bought most of our manufactured goods from England. Then came the stimulus to American manufactures; the rapid growth is best shown by a few figures.

3. The United States becomes a manufacturing country.

a. In 1807 there were 15 cotton mills with 8,000 spindles; in 1811, 87 mills with 80,000 spindles, employing 4,000 workers; in 1815, 500,000 spindles employing 76,000 workers.

b. "The first complete factory in the World."

Steam power used at Ballston, N. Y., 1810. Francis Lowell, at Waltham, Mass., uses the power loom, and brings all the new processes under one roof, making "the first complete factory in the world, 1814."

4. Insecurity of the new manufactures, due to war conditions. Effects of the return of peace: importations in 1814; $13,000,000; in 1816, $147,000,000. English manufacturers, anxious to sell their accumulated goods and to ruin the new American industries, ship enormous quantities at low prices. Hence a strong demand for a "protective" tariff, that would enable the infant industries to survive and grow. Petitions to Congress, 1816–17, from 40 industries. On the other hand, communities that could not or did not engage in manufactures objected that a protective tariff made them pay more for manufactured goods, without any corresponding benefit. Act of 1816 and its successors.

5. Rise and growth of iron and coal industries in the U. S.

Importance of Pennsylvania; growth of Pittsburgh. Iron manufactures rose from 20,000 tons in 1820 to nearly 290,000 in 1840. Increasing demand for coal; use of anthracite.

6. Extension of cotton culture:

The use of new machinery and power, and the growth of American manufactures, greatly increase the demand for cotton, which can be profitably met because of the invention of the cotton gin and the vast areas of new land in the southwest. A large part of the crop exported. Figures best show the growth of the industry. Rapid development of the southwest; by 1834 Alabama, Mississippi, Louisiana, and Tennessee, produced over two-thirds of the cotton grown in the U. S.

7. The new West:

a. Review Topic 11 of VII, continuing study on same lines.

b. Rise of internal commerce. Based on sectional character of industries: (a) Southwest, rapid development of cotton culture, sugar in Louisiana, tobacco in Kentucky and Tennessee, products sold to other sections or abroad, especially cotton to Northeast and England; (b) Northwest food products (meat, grain, butter, cheese, fruits, etc.), found a market in the Southwest; (c) Northeast, manufacturing and commercial. Importance of navigable streams and the invention of the steamboat. The place of the older slave states is obvious. (See Callender, *Selections from the Economic History of the U. S.*, ch. vii.)

8. Progress of transportation and communication:

(See outline for the Fifth Grade).

a. Recall crude conditions of travel and transportation at the time the republic began. Improvement. (Review, 12, d, VII.)

b. Natural routes of travel: a geographical study.

c. Improved roads; canals. Special importance of Erie Canal; Chesapeake and Ohio Canal.

d. The revolution made by the steamboat and the locomotive. Story of the Baltimore and Ohio railroad; improvement in railroads, locomotives, cars, and management; increase of mileage.

e. Invention of the electric telegraph; successful use in 1844. The ocean cable.

f. Improving postal service; cheapening of rates.

9. Use of machinery in agriculture: plows, wagons, reapers, binders, threshers, etc.

10. American inventions:

a. The record of the U. S. is remarkable, but there is little use in memorizing lists of inventions and inventors. They should be taken up in some significant connection, in the manner already indicated in these outlines. They are American contributions to the age of machinery and applied science. Besides those above mentioned, the following at least should receive notice: screw propellor, Ericsson, 1836; vulcanizing rubber, Goodyear, 1839; sewing machine, Howe, 1846; steam cylinder printing press, Hoe, 1847.

b. Increase in number of patents.

It should be remembered that the few big inventions studied are merely examples; hundreds of inventions of value were made, covering the manufacture of textiles and every other field of industrial activity, transportation, and human comfort and safety. The increase in number of patents granted is suggestive: e.g., in the decade ending 1800, about 300; in that ending 1850, nearly 6,000; by 1860 the annual increase was over 4800.

X. Political Reorganization and the Growth of Democracy.

1. Review briefly the history of political parties, 1789–1820 (use needed topics from Seventh Grade, especially 4, 5, 6, and 14—a of VII).

2. In 1820 there is no party conflict; the course of events has been such as to cause a general outburst of national feeling (Topic 14 of VII), and shatter the factious Federalists. Apparently only one party is left. Such a condition could only be temporary; natural divisions of opinion would soon occur, new leaders would arise, and there would be new parties. This is just what happened.

3. Personal rivalries of new leaders: Clay, Calhoun, Jackson, J. Q. Adams, Webster, Crawford.

4. Election of 1824 may be made an interesting study, showing the working of factions and personal rivalries, the germs of new party divisions; the transition

to a new era, end of the "Virginia Dynasty," democratic tendencies in making nominations—discrediting of Congressional caucus, candidates proposed by state legislatures and mass meetings; the election thrown into the House. Charge of "corrupt bargain" between Adams and Clay. Under Adams the process of reorganization goes on, the issues becoming a little clearer and the leaders forming groups; the Adams men or "Ins," the Jackson men, or "Outs;" bank, tariff, internal improvements by Federal government, strong central government are discussed.

5. Jacksonian democracy and the emergence of new parties:

a. Election of 1828: Jackson vs. Adams.

Bitterness of the campaign; charge that the "will of the people" had been defeated in 1824; interest of the masses of the people; weight of the West and the frontier influence; Jackson considered a leader of the "plain people," leader of a new democracy.

b. Significance of the election of 1828.

The election marked the climax of tendencies toward democracy in theory and practice; briefly review the changes, 1789–1829: extending the right to vote to larger numbers of men, a movement toward manhood suffrage; reducing the qualifications for office holding; tendency to elect more officials by popular vote, fix short terms, require "rotation in office;" attempts to popularize party control, the "boss" and the "spoils system."

c. Spirit of the Jacksonian era. The tendencies mentioned in the preceding section continued and acquired greater vigor and success. It was a time of great enthusiasm for democracy and agitation for recognizing it in public life. It was also a time of intense patriotism, taking the form of uncritical pride in the country's history and unlimited confidence in the country's importance and future; this spirit in its best form is represented in Bancroft's famous history. The influence of the West was of special importance (recalling studies of Western life will show why); it took the lead in the new tendencies.

d. Policies of Jackson's administration.

His aims, views of his position, advisers; civil service; destruction of the bank; vigorous foreign policies; opposition to monopoly and privilege; strong assertion of the president's powers—"the reign of Andrew Jackson."

e. Democrats and Whigs.

The political conflicts result in the completion of reorganization. Note also the development of party machinery, as in national conventions and platforms.

"Two-thirds rule" of the Democrats.

The minor parties may be mentioned.

f. Financial measures, speculation, the panic of 1837, and the independent treasury system.

g. National elections of 1836 and 1840.

Excitement and emotional appeals in the latter; the Whigs in power; death of Harrison and succession of Tyler paractically reverses election—illustration of playing politics with vice presidency. Whigs were unable to carry out their program, and a few years later the issues of the time became subordinate to the slavery question and dropped out of active controversy until after the Civil War.

XI. Development of American society, 1820–1860:

1. The people.

a. Census returns show rapid growth of population, and changing distribution.

b. Immigration.

Influence of vast tracts of land, great expansion of industry, development of transportation; need of laborers for construction work, roads, canals, railroads, etc. European conditions, such as Irish famines and poverty, suppression of liberal movement in Germany. Races, religion, social condition, new problems; "native American" movement, "Know Nothing" party.

c. Intra-migration and changing distribution of people:

From East to West, reasons; comparisons of the sections at different periods; growth of cities in number and size, causes. Previous studies of West and Industrial Revolution give basis for intelligent study of this topic, as well as of others in the whole section XI.

2. Humanitarian reform.

a. Administration of justice: milder punishments, better prisons and prison methods, abolition of imprisonment for debt.

b. Care of defective and dependent classes: paupers, insane, etc.; Dorothea Dix. Reform schools.

c. Temperance movement: war on the duel.

3. The woman's movement:

Demand for educational opportunity, just laws for personal and property rights, and the suffrage.

4. Educational reform and intellectual organization.

a. Horace Mann and the common schools.

b. First training school for teachers (1839).

c. Progress of secondary schools.

d. Colleges; land grants for higher education; technical and professional schools; beginning of co-education.

e. Improvements in textbooks and buildings, lengthening of term, founding of educational journals, etc.

f. Public libraries; museums; lectures; publishing houses; learned societies; etc.

5. Social unrest: the "yeasty period." (After 1830.)

a. Theories of socialism and communism (connect with the Industrial Revolution and the growth of a wage-earning class. But the agitation was often conducted and communities founded by reformers who were not laborers); communities, Brook Farm, New Harmony, etc.

b. The spirit is shown in the various and widespread movements for social change (as indicated throughout XI).

6. Religion.

Much religious activity; home missions, American Bible Society; foreign missions; national organization, division on slavery question; influence of immigration; religion in the newer Western communities—"camp meetings," "revivals," circuit riders, etc. Mormons.

7. Literature and journalism.

a. Poets, novelists, essay writers; the sections.

b. Historians. Webster's Dictionary.

c. Beginnings of our modern newspapers; magazines. Possibilities opened by the age of machinery and power, new transportation, telegraph (and later telephone and wireless), improving postal service.

8. New movement for the abolition of slavery.

a. Contrast with earlier movements; sectional character.

b. Leaders, such as Garrison and Lundy.

Moral and religious questions raised; theory of democracy invoked; bitterness toward slaveholders; uncompromising attitude of radicals.

d. Progress of organization, hundreds of local societies, American Anti-Slavery Society (1833). Lectures, books, pamphlets, newspapers, etc.

e. Attitude of the churches; anti-slavery in literature.

f. How the movement was received: (1) Resentment of the South; (2) North, divided—(a) Opinion that the question was settled by the Missouri Compromise, mobing of anti-slavery leaders as trouble makers, opposition to negro property, while (b) the movement made many converts.

g. Internal dissensions; radicals and conservatives; interjection of other questions, such as woman suffrage, political action.

9. Foreign travelers in America and what they thought of us. For example, Dickens. (See J. G. Brooks, *As Others See Us.*)

XII. Nationalism or Sectionalism?

1. What is the Union?

Is the Union a band of states, living in a partnership under the terms of an agreement or "compact" called the Constitution? Or, is it a strongly-bound national Union, "one and indivisible?" If it is charged that the Federal Government is exceeding its powers who shall decide the dispute—the states or the Federal Supreme Court? These are the questions about which controversy raged until it culminated in civil war. It is important to remember that: the people of a state or section did not choose their side by accident or by abstract reasoning, but according to their interests as they understood them at a given time. Hence a man may change his views, as did Calhoun; states and sections are inconsistent from time to time as circumstances change; and even the Supreme Court represented different theories as its membership and the times changed. The leading problem of this aspect of the period 1820–1860 is to follow the struggle of the two tendencies: the natural divisions of interest between sections, so that one could best advance its wishes by having the states strong, while the other could best do so by having the central government strong.

Not much time should be taken at the beginning to define the issue because it is too abstract to mean much that way. Simply do what is necessary to set the problem clearly, then let the course of actual events and concrete cases give the material for later generalizations which can be made with intelligence. Recall the differences of opinion in the early period when the government was being organized, then the strong nationalist movement that brought on the War of 1812 and so greatly changed the old Republican party, and this was followed by new differences and another alignment of parties.

2. The protective tariff and nullification.

a. The tariff question:

Brief review of the tariff question, especially 1816–1828. The two points of view; some sentiment in South for protection at first, growing belief that it was an unfair tax to that section, change best illustrated by Calhoun—his position in 1816 and his "Exposition" after the "tariff of abominations" in 1828.

b. Constitutional questions and proposed remedies:

Recall earlier controversies over "states' rights"—Virginia and Kentucky Resolutions, Hartford Convention, Georgia and the Federal Indian policy; a theory that states North or South used when disatisfied.

c. Some leaders of the section:

Eloquent leaders of the two sections define and argue the question of the nature of the Union: Webster, the nationalist; Calhoun and Hayne, for "states' rights." The "Exposition," the debates in Congress.

d. Tariff of 1832:

South convinced that high tariff may become permanent; indignation and charges of unfairness in South Carolina.

e. South Carolina, acting on the state sovereignty theory, passes an Ordinance of Nullification in convention (November, 1832).

f. Action of Federal government and outcome.

(1) President Jackson's vigorous proclamation and threat to enforce the law if resisted.

(2) Congress: After long debate of the questions, passes on the same day (March 2, 1833) the Force Bill and the "compromise Tariff" proposed by Henry Clay.

(3) South Carolina repeals her ordinance, but reasserts her theory of the right to pass it.

3. Slavery and how it caused sectional feeling and controversy.

a. Recall briefly the story of slavery to 1820, bringing clearly the causes and steps that made the institution sectional.

b. Conditions of slave life:

The cotton plantation, with some reference to sugar and tobacco plantations. Slave "quarters," clothing, food, care, how they worked; discipline; laws; treatment in general. Free negroes. Effect on attitude toward manual labor.

c. "Cotton is King:"

Tremendous growth of cotton culture, due to Industrial Revolution cotton gin, and presence of southwestern lands; effects of this in fixing, promoting, and extending slavery. Rising price of slaves: best field hand in 1790, $200; in 1840, $500; in 1850, $1000; and before 1860 to $1500 or more.

d. Abolition movement in the North, beginning about 1830. See topic 8 of XI. Bitter language about slave-holders and resentment aroused in the South.

e. Was slavery right, a good thing for the negro, and necessary for the prosperity of the South? Or, was it a great evil, bad for both negroes and whites, and a wasteful form of labor?

Arguments that were advanced on both sides. Practical difficulties of general emancipation. Southern attitude; changes under economic pressure and criticism.

f. Slavery before Congress.

(1) Question of "balance of power" in the Senate, and of slavery in the territories; Missouri Compromise.

(2) Petitions against slavery in the District of Columbia; the "Gag Resolutions," and J. Q. Adams.

(3) Attempts of anti-slavery agitators to get the questions discussed.

g. Slavery and politics; the Liberty Party.

4. Expansion to the Pacific; Texas and the far West.

a. Annexation of Texas.

(1) Story of the settlement of Texas by Americans; revolt from Mexico and independence (1836); early effort to bring about annexation to the U. S. Interest of foreign nations, especially England, in Texas.

(2) Tyler's efforts, treaty of 1844 and its failure in the Senate.

(3) The issue before the people, campaign of 1844, arguments for and against, Clay and Polk.

(4) The popular verdict; annexation by joint resolution of Congress, 1845.

b. Oregon (1846).

(1) What was . . Oregon country? Geography; undefined boundaries.

(2) Its early history; claims of four nations; Spain gives up north of 42° (1819), Russia south of 54° 40′ (1824); "joint occupation by Great Britain and U. S. (treaties of 1818 and 1827), claims of each, fur trade, beginnings of American settlement.

(3) Campaign of 1844: "re-occupation" of Oregon, "Fifty-four forty or fight."

(4) Treaty of 1846; President Polk accepts a compromise dividing line to avert war.

c. The Mexican cessions (1848): crossing the Rockies.

(1) War with Mexico:

Difficulties with Mexico (especially 1845–46) and how they led to war; military operations (to be treated very briefly), prominence of Taylor and Scott; Wilmot Proviso; peace, treaty of Gaudaloupe Hidalgo (1848).

(2) Expansion to the Pacific completed. Gadsden Purchase (1853). Geography of the new territory.

5. Question of slavery in the territories; the issue becomes the dominant one in politics.

a. What powers had the Federal government over slavery? Find the sections of the Constitution that implied power to regualte slavery in the territories and District of Columbia, and interstate and foreign commerce, return of fugitive slaves. How could the power to admit states be used? Such a summary will be useful here, recalling incidents from the previous story of slavery.

b. Question of slavery in the new territory.

(1) Various proposals: prohibit entirely; permit and protect; extend compromise line of 36° 30′ to the Pacific; "popular sovereignty;" let the Supreme Court decide.

(2) Oregon; organization as free territory (1848).

(3) Mexican cessions, feeling aroused. Election of 1848.

c. Slavery questions before Congress, 1848–50.

(1) Slavery in the Mexican cessions.

(2) California: discovery of gold, rush of people, organizes government and asks admission as state.

(3) Demand for a stronger fugitive slave act.

(4) Questions of slavery and the slave trade in the District of Columbia.

(5) Texas boundaries and public debt.

d. Compromise of 1850.

(1) Seriousness of the crisis; threat of disunion; Nashville Convention.

(2) Some of the leaders: of the older group—Calhoun, Webster, Clay; younger men, pro-slavery—Davis and Stephens; anti-slavery—Seward, Chase, Giddings.

(3) Clay brings forward a series of measures designed to settle the whole slavery issue by a policy of compromise. Effect of the death of President Taylor.

(4) Terms of the compromise measures as finally passed.

(5) Make a table of parallel columns showing the questions at issue, desire in each case of pro-slavery and anti-slavery advocates, how it was settled.

e. Results of the great Compromise.

(1) Brought peace for the moment; belief of many in its "finality," hope that the whole slavery quarrel which endangered the Union, was now settled. Election of 1852.

(2) Abandoned the plan of equal representation in the Senate.

(3) Put into operation the principle of "popular" or "squatter sovereignty."

(4) The new fugitive slave act proved a source of friction. "Underground Railroad;" "Personal Liberty" laws.

6. Efforts to gain new territory for slavery: interest in Central America and Cuba, Ostend Manifesto.

7. Question of slavery in the old territory: undoing the Missouri Compromise.

a. Growth of population west of the Mississippi suggests organization of territory of Nebraska and Kansas.

b. Douglas of Illinois proposes to apply the theory of popular sovereignty. Indignation in the North, general excitement.

c. Kansas-Nebraska Act repeals the Missouri Compromise; terms of the law.

d. The contest thus re-opened with new bitterness; charges of bad faith.

e. "Bleeding Kansas:" struggle for control; attitude of the president and Congress.

8. Reorganization of political parties; drawing sectional lines.

a. Slavery now the dominant question; old parties divided on the subject and could not endure.

b. Democrats tend to split into two wings, which occurs in the campaign of 1860; Whigs go to pieces.

c. New Republican party organized (1854–56); elements of its membership; principles and leaders; necessarily sectional.

d. Very rapid growth of the Republican party; election of 1856; in 1858 elected largest number to House of Representatives.

9. Dred Scott Decision, 1857.

a. Recall the early history of the Supreme Court, and its stand for nationalist theories under John Marshall. See VII, 14–c, of Seventh Grade Outline.

b. Membership of the Court gradually changes; death of Marshall and appointment of Taney. The Court tends to be "strict constructionist."

c. Facts in the Dred Scott case as it came before the Supreme Court Constitutional questions involved; the Court's decision, views of the minority who "dissented."

d. Was the decision sound? If so the Republican party existed for an unconstitutional purpose; its leaders declared that the Court had unnecessarily dragged in the issue of slavery in the territories and had no right to settle such a great political question and had erred in other ways.

10. Lincoln-Douglas Debates, 1858.

Occasion of the debate; views of the two men; importance in promoting discussion of the question of slavery in the territories, and in making Abraham Lincoln known to the people of the whole country.

11. Attacks on slavery as morally wrong and socially evil:

a. These go on with growing intensity, side by side with the great political struggles that have been studied.

b. Attacks in literature.

(1) Northern newspapers, especially Horace Greeley's N. Y. Tribune.

(2) New England poets: Whittier, Longfellow, Lowell.

(3) "Uncle Tom's Cabin" and feelings it stirred up in the two sections.

(4) Helper's "Impending Crisis."

c. In the churches: sectional feeling general, splits in several.

d. Rescues of fugitive slaves.

e. Attempt to start a slave insurrection.

(1) John Brown; his characteristics and career.

(2) His Harper's Ferry "Raid," its failure, and his execution by Virginia.

(3) What a slave rising would mean in the South; intense indignation caused by the support and approval given to Brown by extreme abolitionists.

XIII. Crisis of the Union: One nation or two?

1. Campaign of 1860 for control of the national government:

a. The new Republican party, its strength, both nominees from the North, its program which could win no support in the South; split of the Democrats on sectional lines; the Constitutional-Union party and its significance.

b. Analysis of the vote by states and sections can be made interesting and valuable; maps in most recent books.

c. Victory of the Republicans, regarded by South as purely sectional, and a menace to that section. What Republican leaders said; moderate tone of Lincoln.

2. Sectionalism succeeds:

a. Secession of Southern states (Dec. 21, 1860 to June 8, 1861); lead of South Carolina, Gulf states, reasons assigned and claim of constitutional right; Southern Confederacy organized.

b. Failure of conciliation efforts.

c. Inauguration of Lincoln; his inaugural and attitude in the crisis.

d. The appeal to arms: Fort Sumter, Lincoln's proclamations, secession of four more states when compelled to choose, outburst of patriotic feeling and preparation for war in both sections.

3. Causes of the war: what the sections fought for:

a. Review subjects of difference and bad feeling.

b. Constitutional questions; view of each side regarding the nature of the Union and right of secession. Review of this question from the beginning of the nation, but simple and brief, to bring out large points only.

c. Summary, stating briefly and clearly the causes, immediate and underlying. Both in this section and throughout the study of sectionalism the teacher should strive especially for a spirit of fairness on the part of pupils; it is not for the teacher or class to settle the question of who was right or wrong, since that is a matter of individual opinion. Find out what happened and how the issues were viewed from each side of the controversy, bringing out the sincere devotion to right as they saw it by the leaders of both sections, and by the people of both.

4. North and South on eve of the war:

a. Resources and advantages of each in population, industry, etc.

b. To what extent was sentiment divided in each section? Problem of the border states.

c. Nature of the military problem of each side. Geography.

5. The war for the Union:

There are so many other important topics that military history must be briefly treated (See comments on other wars in this outline). The blockade. Chief campaigns and great leaders; what the Federal armies and navy had to accomplish to win the war. It is easy to select from the many great battles a few for type studies, e.g., Chancellorsville, Gettysburg, Chickamauga, siege of Vicksburg. Fight of the "Monitor" and the "Merrimac" or "Virginia" is of special interest as the first between ironclads, marking the beginning of a new order in naval warfare; it is an excellent chance also to study a disputed result.

6. Conditions during the war—North and South:

a. Paying for the war; paper currency, its great decline in the South; National Bank Act (June 3, 1864).

b. Differences of opinion; attacks on those in power; conscription.

c. Industrial and business conditions.

7. Putting an end to slavery:

a. Show how consideration of the slavery question was forced, in spite of the contention of the North that the war was waged solely for the Union (utterances of Lincoln; Resolution of July, 1861, in Congress).

b. Acts of Congress, especially abolition in the District of Columbia and the territories (1862), and repeal of the fugitive slave act (1864).

c. Emancipation proclamation by President Lincoln, applying to states resisting the authority of the Federal government; purpose and effects; an exercise of war power.

d. Abolition by state action.

e. Thirteenth Amendment to the Federal Constitution (in effect, Dec. 18, 1865): "It winds the whole thing up" (Lincoln).

8. Reconstructing the Union:

a. Perplexing questions raised by the victory of the North: were the seceding states in or out of the Union and how could they be restored to their old partnership without endangering the results of the war? How should the white people of the South who had fought against the Union be treated? What could be done for the negro freedom?

b. Undertaken by the president: views of Lincoln; his assassination and the efforts of his successor, Johnson.

c. Undertaken by Congress: quarrel between Congress and president; the radical leaders, Stevens and Sumner; severe policy adopted by Congress: conditions in the South, part of negroes, "carpet-baggers" and "scalawags," the Klu Klux Klan, Federal repression.

d. Impeachment of President Johnson.

e. Fourteenth and Fifteenth Amendments adopted (1868, 1870).

f. General Grant becomes president, and supports Congress. Much opposition to the radical policy toward the South. Political scandals.

g. Decisions of the Supreme Court on some great questions at stake in the war and reconstruction: making nationalism legal.

h. Disputed election of 1876; troops withdrawn from the South (1877), "white supremacy" restored.

9. Relations with foreign countries:

a. France: attitude of Napoleon III during war; his interference in Mexico; enforcing the Monroe doctrine (1861–67).

b. England: attitude during the war; American claims for breaches of neutrality; treaty of Washington (1871), arbitrating the question. Arbitration of fisheries dispute, 1877.

c. Russia: relations during the war; purchase of Alaska.

d. Naturalization and citizenship: questions arising from large immigration; treaties with several European nations (German states, Austria, Belgium, France, Great Britain), beginning 1868.

10. Industrial and business conditions:

This topic is best treated in connection with the development extending into our own times, but may be touched in connection with the crisis of the Union. The South suffered economic ruin, later to be succeeded by a wonderful development; in the North great business prosperity prevailed, the people were spared the ravages of invasion, and business was stimulated by the high war tariff and the demands of the war. Rise of big corporations; development of commerce and transportation; growth of West.

XIV. The New Union.

1. Progress of the age of machinery and applied science:

a. Review briefly the great transformation of industry and society inaugurated by the Industrial Revolution (Topic VIII). All the great lines of change continued rapidly. Centennial Exposition of 1876 and what it showed.

b. Iron and steel; coal; great development of mining.

c. Travel, transportation, and communication.

(1) Improvements in steam locomotive and steamships, railroads and cars for freight and passengers, in steam-engines for all kinds of industrial purposes.

(2) Electricity; improvement of the telegraph; invention of the telephone and improvement until conversation across the continent is possible (1915); wireless telegraphy. The trolley car and the electric locomotive; elevated and subway railroads.

(3) Construction of great bridges and tunnels.

(4) The gas engine and its importance; development of the automobile; Langley, the Wright brothers, and the aeroplane; the dirigible airship.

(5) Improvement and cheapening of the mail service.

(6) Life-saving service (1879); "standard time" (1883); many devices for increasing the comfort and safety of travel, e.g., the air-brake (Westinghouse, 1868), better lighting and heating of cars and vessels, vestibuled trains, regulating traffic by telegraph.

(7) Improvements in the printing press (recall Hoe); invention and improvement of typesetting machines and the typewriter.

d. Cities: continued increase in number and size; compare with 1789 and 1860; causes.

e. Housing: steel, concrete, machinery and power make possible the "skyscraper" office buildings and great apartment houses; elevators, light, heat. Improvements in the single house.

f. Food: air-tight vegetables and fruit; the refrigerator car; cold storage.

g. Agriculture and rural life: machinery, power, and high explosives in farming; scientific agriculture; diminishing isolation of rural life—railroad, electric cars, telephone, newspapers, better mail service (rural free delivery), etc.

h. Modern warfare: more terrible explosives; giant cannon; the machine gun; airships and submarine boats; the warship as a complex mechanism. It is an age in which men even kill their enemies by machinery and applied science.

2. The age of "Big Business."

a. Rise of great corporations; the "trust" problem. Show how the wonderful progress of the age of machinery and the rapid development of industry accompanying it, made an era of "big business." Larger and larger sums of money needed for this business, growth of corporations (in which hundreds or thousands could invest) in number and amount of capital. How there grew out of this condition the problems of trusts. History of Standard Oil Co. a good study.

b. The workers; rapid increase of wage-earning class, their troubles and problems; class consciousness of labor and conflict with capitalist employers, unions (increasing to national organizations—Knights of Labor, American Federation of Labor—and great industrial unions), strikes, boycotts, etc.

3. Business and government; problems of political reform.

a. Show how the progress of the age of machinery, the rapid advance of industries, and the growth of large business enterprises, raised many new problems for government—national, state, and local. The following topics indicate a few important lines.

b. Transportation and interstate commerce.

(1) Uniting the railroads into great trunk line systems; rapid increase of the country's mileage.

(2) Showing favors to some shippers against others.

(3) Evils of competition; combination and "pooling."

(4) Granger movement; Farmers' Alliance; increasing agitation for regulation of railroads.

(5) Interstate Commerce Act, 1887, its provisions and effects; later additions and modifications, work of the Interstate Commerce Commission.

(6) Improvement of harbors and waterways; "pork barrel" legislation.

c. The problem of trusts and monopolies.

(1) Meaning of the terms: "natural monopolies;" public service companies. Difficulties of problem.

(2) The Sherman Act, 1890; some important cases arising under it (such as dissolution of the Standard Oil Co.).

(3) State efforts at regulation; public service commissions.

d. Problems of the workers and of immigration.

(1) Controversies of "labor and capital." Strikes and violence. Some of the demands of the workers. Appeals for national and state legislation. The courts and injunctions. The president and protection of mails, interstate commerce, and Federal courts.

(2) Immigration and how it interests the American laborer. Objection to foreign contract labor; law of 1885. Chinese labor excluded; Japanese question. Questions about the regulation of immigration.

(3) U. S. Bureau of Labor (1884); a Department with a Secretary (1903, 1913).

(4) Regulating and restricting the labor of women and children

e. Problems of the tariff and financial organization.

(1) Effect of the high war tariff on business; strong demand for "protection" and claim that it aided the workers and the general prosperity as well as the proprietors of protected industries. Tariff acts of 1890 (McKinley), 1894 (Wilson-Gorman), 1897 (Dingley), 1909 (Payne-Aldrich), 1913 (Underwood).

(2) Election of 1896, with simple story of the decline in value of silver, interest of the West, coinage act of 1873, etc. Increased production of gold and changes it brought about; the "gold standard" (1900). The Federal Reserve Act of 1914.

f. *The civil service; meaning, early history; Jackson and the "spoils system" in national politics;* agitation for reform; Civil Service Act of 1883; attitude of President Cleveland, Roosevelt and the "merit system." Efforts for reform in the government of cities and states.

g. Elections and the right to vote (states).

(1) Laws against corrupt practices in elections.

(2) The Australian ballot system; voting machines.

(3) Spread of direct government: direct primaries, initiative and referendum, the recall.

(4) Restrictions on the suffrage in the South and the reasons.

(5) Important extension of woman suffrage in the West.

h. Conservation of natural resources; alarming waste of the gifts of nature; allowing public wealth to get into private hands; danger of monopolies; special importance of forests. Movement for state and national action; work of President Roosevelt.

i. The "progressive" movement in politics; the Republican "insurgents;" split in the Republican party, 1912, contest of Roosevelt and Taft, formation of the Progressive Party, its showing in the election and decline in later contests.

4. The Great West:

a. Review briefly the story of westward expansion, growth of population, social and political characteristics, influence in the nation.

b. Development of the far West; and of the frontier and its significance. Pacific railroads, their construction and influence. A few years later oversea expansion begins.

c. Laws of 1862 (Homestead) and 1873; influence in promoting settlement Foreign immigration. New states admitted.

d. Great industries: development of mining; great wheat belt; cattle and sheep raising; fruit growing on the Pacific coast. Importance of the refrigerator car. Irrigation system, Roosevelt Dam. Forest reserves.

5. The New South:

a. Economic ruin of the South after the war; remarkable development that followed.

b. Recovery of supremacy in cotton growing; improved methods of culture and better gins, seed as by-product.

c. Spread of rice culture; sugar growing (question of tariff protection).

d. Lumbering and oil industries developed.

e. Beginnings and growth of manufactures; cotton mills; iron industry of northern Alabama. Increase of railroads.

f. The labor problem.

g. Growth of schools and colleges; public schools for negroes, also important higher institutions (private), such as Hampton and Tuskegee institutes.

6. Intellectual, social, and humanitarian progress:

a. Recall the study made of the same subject under topic XI, and trace development in a similar way. The following are supplementary suggestions.

b. The people: changes in the character of immigration since the Civil War: problem and some of the proposals for dealing with them.

c. The woman's movement: extensive success of the equal suffrage movement in the West, and active campaigns in other parts of the country; general disappearance of unfair discrimination in the laws and increase in educational opportunity; growing importance of women in business life and in the professions.

d. Educational reform and intellectual organization.

(1) Founding of Johns Hopkins University and introduction of German ideas and methods of scientific research; influence on other institutions for higher education.

(2) Increasing emphasis on the practical in education; less attention to Greek and Latin; technical high schools; teaching of agriculture, etc. "Electives in schools and colleges.

(3) Growing insistence on professional training and adequate education for teachers; professional organizations and publications.

(4) Great endowments by American "captains of industry," for scientific and historical research (Carnegie Institution of Washington), medical research (Rockefeller Institute), advancement of education (Carnegie Foundation, General Education Board), promotion of international peace (Carnegie Foundation).

(5) Growth of public libraries, both large and small; gifts of Andrew Carnegie; Boston Public Library, New York Public Library, Congressional Library in Washington, (Libraries of Baltimore).

(6) Art Galleries: Metropolitan in New York, galleries in Boston, Chicago, Baltimore.

(7) American painters, sculptors, architects of high rank.

(8) Effects of the great modern printing presses, type-setting machines, and other improvements in printing; multiplicity of books, cheap editions of classics, improved school textbooks, modern magazines, great metropolitan newspapers of today, pictures at small cost.

(9) Invention and improvement of the phonograph and the moving picture.

e. Organized work for rural improvement, charities in great cities, regulation of labor of women and children and other social improvement.

f. Sanitation and public health; departments of health and their work; the war on tuberculosis; new knowledge of diseases and their causes and prevention (malaria, yellow fever, typhoid, etc).

g. Immigration and society; some of the problems it brings.

h. Changed position of America in the eyes of foreigners. How nations may learn from one another.

7. Over-sea expansion, "imperialism," "world power."

a. This phase is ordinarily dated from 1898, but is clearly foreshadowed by the U. S. for some years previous, particularly:

(1) The interest of the U. S. in the Pacific (Samoa, 1887–; Hawaii, isthmian canal question).

(2) Blaine's Pan-American policy; desire for leadership of U. S. in western world; Pan-American Congress (1890).

(3) Cleveland and the Monroe doctrine, new vigor and extension in the Venezuela case (1895); later development.

b. The war with Spain, 1898.

(1) Caused by conditions in Cuba, destruction of the "Maine" in Havana harbor, American property and commercial losses, feeling stirred up by sensational newspapers.

(2) Naval victories at Manila and Santiago; fighting in Cuba; invasion of Porto Rico.

(3) Peace treaty at Paris, November, 1898; U. S. acquires the Philippines, Porto Rico, Guam; Cuba independent, but passes under American protectorate.

c. Problems of governing the new possessions; insurrection in the Philippines. The "anti-imperialistic" movement in the U. S.; presidential campaign of 1900; attitude of President Wilson and the Democrats.

d. Annexation of Pacific islands: Hawaii (1898); part of Samoan group (1899); several small, unclaimed islands. Importance of coaling stations for modern warships.

e. The Far East; "World Politics."

(1) John Hay and the "open door" policy.
Boxer uprising.

(2) Mediation in the Russo-Japanese War (1905).

(3) Relations with Japan.

(4) Part taken in various international congresses.

f. The international peace conferences at the Hague; part taken by the U. S. (1898–).

g. The Panama Canal.

(1) Brief review of earlier interest in the project of an isthmian canal; negotiations with England and France.

(2) Independence of Panama (1905), cession of Canal Zone to U. S.

(3) Work of construction, difficulties, Goethals; opening in 1914.

(4) The new era which it opens.

h. The new Monroe Doctrine and relations with Latin-American countries.

(1) Cleveland and the Venezuela case; American notice at the first Hague Conference in 1899; German and other claims against Venezuela in 1901; Roosevelt and Santo Domingo, 1904–.

(2) Growing resentment of Latin-American countries; attempt to allay it.

(3) President Wilson and the anarchy in Mexico, 1913–.

i. Adjustment of other foreign relations.

(1) Settlement of the Alaskan boundary by arbitration, 1903.

(2) Settlement of disputes with England and Canada over fishing rights, dating from the treaty of 1818, in 1910, by arbitration.

(3) Numerous arbitration treaties; extension under President Wilson and Secretary Bryan..

XV. Our Own Time and Its Problems:

The topics of the preceding group should be brought up to the present time, but it will be well to use such a topic as XV in order to make the course definitely culminate with a study of the conditions and problems of our own times. This study will be all the more effective if made in connection with topical reviews to bring out the main lines of development (see p. 492). Thus it will be possible to realize the central purpose, to show how the life of our own times came to be what it is, and to aid in the intelligent study of its great public problems. In this latter part especially, the history work correlates most closely with the civics and practically merges with it.

THE GREATER EUROPE

N. B.—The Course of Study of 1909 included part of this outline on "The Greater Europe" because it was believed at that time that we should study the growth of nationalism not only in our own country but also in the other leading World Powers.

The revision committee in 1915 felt that because the course in American history might become too heavy, it would probably be just as well to omit the European history altogether. It was decided, however, to print the outline, leaving it to the individual teacher to settle for himself whether he would include it in his schedule. Now, in 1918, when twenty-two nations of the world are allied to fight against German autocracy it seems very necessary and vital to include more European history in our curriculum if we are to understand why the cataclysm has come upon us—the greatest since the break-up of the Roman Empire, indeed the greatest in the history of the world. Eighth grade teachers, therefore, are urged to teach the European history in order to develop intelligently the principles that underlie nationalism, internationalism and imperialism, and to make vivid to boys and girls the problems that will confront the world in the process of reconstruction at the end of the war.

I. England and the Growth of Democracy.

1. Repeal of the Test Act (1828) and Catholic Emancipation (1829).

2. Reform Bill of 1832; improved representative system and rise to political power of the "middle class;" later reform bills (1867, 1884, 1885) and the admission of the workers to a share in the government.

3. Social reforms: factory laws and other measures to protect the workers; public education; old age pensions (1908); social insurance (1911); taxing the large landholders (Lloyd-George budget of 1910).

4. Recent changes to complete the supremacy of the House of Commons and the ministry representing them, over the House of Lords as well as over the king.

5. The British and the self-governing colonies, especially Canada.

6. The New British Education Bill (1917.)

7. The Labor Parties in Great Britain (1918).

II. The Growth of Nationalism.

Compare with the struggles for nationalism in the U. S.

1. Unification of Italy: Cavour, Garibaldi, Victor Emmanuel; the kingdom of Italy and its problems.

2. Unification of Germany: the customs union; Bismarck and William I; defeat of Austria and formation of the North German Federation (1866); the war with France (1870–71); proclamation of the empire (1871). The Menace of Prussianism.

3. France under the Third Republic; the war with Germany (1870–71) and overthrow of the second empire; problems of the republic, strongly democratic tendencies and influence of radical parties in public affairs.

III. Spread of European Civilization.

1. "Imperialism" and what it means; the competition for trade and opportunities for the investment of capital.

2. Africa: explorations of Livingston and Stanley; most of it seized by the European Powers.

3. Asia:

a. China and its relations with Europe and America; great changes; setting up a republic.

b. Japan: its rapid and wonderful transformation; becomes Europeanized and a world Power; war with Russia (1904–05); annexation of Korea; alliance with England. Relations with the U. S.

c. Interests of European nations and of the U. S. in the "Far East."

IV. The World Crisis—War of 1914.

REFERENCES: Robinson and Beard, *Development of Modern Europe*, Vol. II, Ginn, $1.50; and *Readings* by same authors: Hazen, *Europe Since 1815*, Holt, $3.00.

WHERE TO FIND INFORMATION

GRADES VII—VIII

To make the work either interesting or profitable the teacher must know much more than the text book can give. It is not possible here to give adequate reference lists; the teacher is referred to the topic *Where to Find Information* under "Some Suggestions for Teaching History: Grammar Grades," pp. 494–495; to a list of historical atlases on pp. 486-487 and to the selected and annotated references in the *Teachers' Year Book for the State of Maryland, 1912*, pp. 74–92.

Several recent books ought to be especially mentioned here:—Bassett, *A Short History of the United States* (Macmillan, 1913, $2.50); *The Riverside History of the United States*, edited by Wm. E. Dodd, (1915) containing the four volumes: I, Becker, *Beginnings of American People;* II, Johnson, *Union and Democracy;* III, Dodd, *Expansion and Conflict;* IV, Paxson, *The New Nation* (Houghton); Channing, *History of the United States* (3 vols. to be completed in 12 vols.) (Macmillan, $2.50 a vol.); McLaughlin, *Readings in American History* (Appleton, 1914, $1.50); West, *Readings in American History* (Allyn and Bacon, 1914); Muzzey, *Readings in American History* (Ginn, 1915).

All seventh and eighth grade teachers should read the Fifth Grade Course for its outlines and the references included in the outlines. The ground covered is the same though the treatment is very different, necessarily, and the references mentioned there will help not only the fifth but the sixth, seventh, and eighth grade teachers.

For the European topics possibly Robinson and Beard, *Development of Modern Europe*, 2 vols. (Ginn and Co.) is the best text available. (Brought up to date by Prof. Robinson, 1918.)

CIVICS: GRAMMAR GRADES

The Point of View. Civics is one of the school subjects in which new tendencies are now apparent. There is a growing opinion that more attention should be given to the subject, in the elementary as well as in the high school, but at the same time a commonly-expressed feeling that the traditional study of the machinery of government with much emphasis on constitutions, is both tedious and ineffectual. New books are beginning to appear in response to this demand, and such topics as city planning, city health, drainage and sewerage, cleaning the streets, housing, smoke and noise abatement, freight terminals, public recreation, schools, and the public library, are made the basis of the work before the study of formal Government. Thus we are tending toward a study of much in elementary social economy and relatively very little on the actual machinery of government, some critics will say too little. Certainly such material is of vastly more interest and value to children in the grammar grades than the memorizing of constitutions and the details of election machinery and terms of office. The space actually given to government in the narrower sense is used largely to explain the practical workings and the nature of the public services performed and the child's immediate surroundings, matters of which he hears discussed at the table perhaps daily, are made the point of departure. From city, to state, to nation, is the order of procedure.

"Just as the mother cannot act intelligently in the home unless she knows about the play of outside forces in the home, so the citizen cannot act intelligently in the community unless he views it in its proper relation to the state and nation. Perhaps the garbage cart is the only community institution which is purely local in character. All other essential matters—water, milk, food, clothing, shelter, education, income, and freedom—cannot be determined by community action; they are of state and national concern." Beard, *American Citizenship.*

The work of the Boy Scouts, Girl Scouts, Camp Fire Girls, and of the Public Athletic League and the Girls Playground Associations should be utilized wherever possible: their publications are available, and the children in our schools are members of such associations. To avoid waste, and to make both play and life activities conform—teachers should definitely plan to use these activities.

But probably the best procedure is to link the civics program of the school to some vital social welfare agency in the community so that boys and girls may be educated in an understanding of the problems that confront society, problems that are related to local government, to national government, and to good citizenship generally. In 1915, a plan was made to set forth such a project by having the schools affiliate with, and supplement the work of the Compulsory Attendance Department, of the Maryland Childrens' Aid Society, and of the Juvenile Court. The following details will make clear the ideas that led to the organization of a Junior Children's Aid Society [named Junior "Children's Aid" to show its relation to the Maryland Children's Aid Society] and the development of its work.

The Junior "Children's Aid Society" of the Baltimore County Schools

Object

The object of the Junior Children's Aid Society is to secure the interest of schoo[1] children in the great problems underlying community welfare, especially in the problems of their own neighborhoods.

Plan

The plan is to bring about an organization of branches of the Junior Children's Aid Society in the schools of Baltimore County; these organizations to have officers and stated meetings for definite objects. Each branch is to organize its activities so that they will best aid the Baltimore County Children's Aid Society in its work for unfortunate children. All the funds and donations turned over by them to the Maryland Children's Aid Society are to be used to enable neglected and poor children to take advantage of a public school education.

School Organization and Procedure

With much material, in the Course of Study that could be related to the work of the Junior Children's Aid Society, it became a problem to get the classroom work so organized that no other phase of civics and sanitation in the Course of Study should suffer, and yet that good use should be made of the topics that relate to the work of the Children's Aid Society. The following plan was devised by principals, teachers and supervisors:

1. All children, by virtue of being promoted into the fourth, fifth, sixth, seventh and eighth grades, and the four years of high school, become "ipso facto" members of the Junior "Children's Aid Society."
2. All children in these grades who pay the membership dues of ten cents become active members of the Society, with the privilege of voting and holding office.
3. Active members meet once a month to transact the business of the Society.
4. The principal and one or two teachers of the school, act as advisors to the Society. These teachers are chosen or volunteer to do the work, because they, themselves, have a social consciousness, and believe fully in the aims of the Society and the results that can be accomplished.
5. A program committee of each local society, chooses from the list of topics, subjects to be presented at an assembly once a week, each grade being responsible

according to schedule for presenting a topic. For instance, should a sixth grade be assigned to take charge of this Friday's assembly, and should the topic for discussion be: "The Baltimore County Water Supply, and how it affects the health of the County people," then the sixth grade for two or three weeks prior to the assembly will be studying in the class-room this topic of civic sanitation and the various aspects of the problem of supplying Baltimore County with water will be discussed at the assembly by the children of the sixth grade. They and their teachers decide just how to present, in an interesting way to the whole school, this matter of water supply and disease, and the relation of disease to compulsory attendance.

At regular intervals, then, each grade has charge of an assembly topic, at which civic problems are discussed, and the work has been done in the class-room, under the direction of the teacher, has grown out of the Course of Study, and, yet, becomes one of the activities of the Junior "Children's Aid Society."

It may seem a far cry from the time when a ten-year-old child in a fifth grade studies these problems in school just as he studies arithmetic and English, to the time when he is a full-fledged citizen of the world, and a responsible father to the next generation of school children. But we believe that such an educational program as has been tentatively outlined here will make young citizens grow up with an intelligent knowledge of some of the vital problems that confront our congested cities, and our isolated districts.

Nothing could be more vital than an understanding of this big problem in its larger phase of educational possibilities, rather than in its smaller phase of charitable opportunity. For it is always true that, if a starving child, ragged and emaciated, is raised up before a multitude of people, all hands will go down into pockets, and money will be poured out for the child's benefit. There is too much of this kind of charity in the world. It became our problem to have the children pay not only membership dues, but to begin to study the causes of poverty; poor attendance at school; preventable disease, which when not prevented makes the school attendance officers' problem more difficult; and all the things that have to do with child-welfare; so that, through the process of education, a new way of looking at all of the problems that confront society might be given to this growing generation of boys and girls who are themselves to be citizens in a few years ready to take up their work in the world.

To do this it seemed logical to examine the Course of Study to decide which topics in it shed any light at all upon problems of child-welfare.

The hygiene and civics courses offer the opportunity. Here is a list of the topics chosen from the Course of Study that give rich material for children to discuss and debate at their society meetings.

Topics for Discussion and Debate at Junior Children's Aid Society Meetings

I. From Fifth Grade Physiology and Hygiene Course:

1. Air and ventilation.
2. Sleep and sleeping habits.
3. Cleanliness and disease.
4. Care of the body; teeth, nails, clothes, etc.—the common towel and its dangers.
5. Eating: what, when, how, and how much—the common drinking cup and its dangers.
6. First aid to the injured.

7. Public Athletic League and what it is doing for boys and girls.

II. From Sixth Grade Civics Course:

1. Department of Health in Baltimore County; in Baltimore City. Fighting contagious diseases. Health in the schools.

2. The Baltimore County water supply. How does it affect the health of the County people?

3. Milk: supply and milk inspection.

4. Immigration and naturalization.

5. Juvenile Courts. The compulsory attendance touches the life of each child in the county.

6. Flies and disease, a civic problem. The daily lunch box and its care.

III. From Sixth Grade Physiology and Hygiene Course:

1. Food inspection.

2. Tobacco and national vigor.

IV. From Seventh Grade Civics Course:

1. Mosquitoes and Disease—a civic problem.

2. Current events that have to do with legislation on child labor laws. Newsboys permits, employment, certificates, etc.

3. The movies—helpful and beautiful.

V. From Eighth Grade Civics Course:

1. State charities—asylums, almshouses.

2. State penal institutions.

3. The campaign against tuberculosis.

Concrete Suggestions

Glancing over this list one may well ask how does such a problem as "Good Roads" relate to the subject of child-welfare? The answer is this: In some communities there are poor roads and clay soil. In these communities we have found that the poorer children are kept out of school very frequently because they have no shoes. Upon investigation it was discovered that in many of the families only the cheapest shoes could be purchased; the poor roads and clay soil cut out these shoes in almost less than ten days' time, and an economic problem was, therefore, set up in these families to provide money to purchase another pair of shoes, possibly for two, three, or even four children in a family. And where the income for a family of nine persons is only $12.00 a week, the economic problem for that family is almost impossible of solution.

The following reports from several schools show how the work is developing:

Franklin High School

The pupils of Franklin High School assembled in Landstreet Hall on December 19, 1916, to hear the report of the committee that visited the Juvenile Court.

The assembly opened with the song, "Day by Day the Manna Fell." This was followed by a talk on the History and Development of the Juvenile Court by Baker Clarke. He emphasized the fact that the Juvenile Court started because of the bad effects of putting children with older criminals. He cited many instances of the good work done by this court. Then Ethel Uhler and Mabel Hobbs gave interesting talks on the various cases tried on the day they visited the court. Especially interesting were the accounts of the case of the small boys who stole rifles and killed a man. They both thought that the boys were not real criminals but victims of circumstances. If the boys had had the proper home training in all probability they would have been better children. Following these came a short talk on the atmosphere of the court by Edwin Fromm. He laid stress on the fact that the court was conducted in the most informal manner possible. After this the president read the report of the Thanksgiving offering and a letter from Miss Lucas

telling how the articles were distributed and thanking the society for their offering. The Junior Children's Aid Society's leaflets were distributed among the members of the society. The meeting closed with the singing of "America."

Towson High School

The January meeting of the Children's Aid was conducted by the president, Parks Duffey.

After a short business meeting the Seventh Grade took charge of the literary part of the program.

The civic topic "The Mosquito and Disease," was discussed as follows:

Life History of the Mosquito—Paul Loizeaux.
The Yellow Fever Carrier—Thelma Leitch.
The Malarial Mosquito—Parker Frames.
How Panama Was Freed of Fever—Upton Brady.
The Mosquito, a menace to Towson—Paris Rugby.
What We Can Do to Help Free Our Town of Mosquitoes.

Signed, Maxwell Sacra, *Secretary.*

Catonsville High School

High School Report:

The High School Department of the Junior Aid Society of Catonsville High School was reorganized for the school year on November 13th, 1917. with one hundred and eighty one members. The following officers were elected:

President—Ernest De Kalb.
Vice-President—Catherine Hayden.
Recording Secretary—Margaret Cowan.
Corresponding Secretary—Gladys Johns.
Treasurer—Ben Rich.

The first regular meeting was held on December 21st, with the president in the chair. Reports from the Secretary and Treasurer were read.

We were particularly fortunate in having with us Mr. S. M. North, Supervisor of the High Schools of the State of Maryland, who gave a very interesting talk on "The Responsibilities of the Next Generation."

An original play, "Hooverism." was presented by the third year and was enjoyed very much by everyone.

The program ended with the singing of the Christmas carols and some patriotic songs by the Glee Club.

The High School classes provided clothing, gifts and food for several families in the neighborhood.

A meeting of the Aid Society was not held in January because of interruptions to school work due to frozen water pipes, Monday holidays, etc.

II B Class is planning to visit the Juvenile Court at Towson this month and will give a report of its visit at the February meeting of the Junior Aid.

Margaret Cowan, *Secretary, Junior Aid Society.*

Highlandtown School

The Junior Aid meeting of Highlandtown School was held on March 23, 1917, the topic being "Milk." The meeting was opened with the singing of "The Star Spnagled Banner." Some interesting accounts were read by the pupils. The subjects were "Board of Health," "Pasteurization of Milk" and the food elements and bacteria were explained fully. There were several recitations; a duet, "I Am Going a Milking," was rendered by two small children. A violin solo was given by a boy of the higher grade.

Viola Wallis, *Secretary.*

Pimlico School

First Aid to the Injured

On Thursday, December 14, 1916, the members of the Children's Aid Society gathered by classes about the gymnasium to hear a talk given by Mr. Edwin Getier, senior patrol leader of troop 94, of the Arlington Boy Scouts.

Our principal, Miss Porter, gave the members an introduction to Mr. Getier. He then began his talk. His subject was "The First Aid to the Injured." With each talk he gave demonstrations with the Boy Scouts of Pimlico School.

The talks were on drowning, snake bites, fainting, methods of carrying the injured, and in each talk the main point was to "keep cool."

After the lecture the classes marched out and were dismissed from their class rooms.

EVELYN MYERS, Grade VI, Pimlico School.

GLYNDON SCHOOL

The regular monthly meeting of the Junior Children's Aid Society of Glyndon School was held on January 18, with the Sixth Grade in charge.

The President opened the meeting, and after the song, "My Country 'Tis of Thee," the Sixth Grade talked on the topic, "The Lunch Box."

The following topics were discussed: "The Lunch Box," by Georgiana Soule; "Proper Food for Grammar Grades," by Albert Knight; "Proper Food for Primary Grades," by Royston McKenney; "Some Good Lunches for Primary Grades," by Donald Krauch and Richard Teal; "Some Good Lunches For Grammar Grades," by Reese Arnold and Kent Bellows, and "How to Eat the Food," by Agnes James and Wilton Frantz. After the reading of the papers there was an open discussion and good results followed the next day.

The meeting was then adjourned by the President.

KENT BELLOWS, *Grade 6, Secretary.*

HOW TO BEAUTIFY ESSEX

As our homes are in Essex we would like to see it become one of the most progressive towns on the eastern side of Baltimore. A great many of these improvements can be brought about by the children of Essex School.

Our first and simplest plan will be to keep the schoolground, highway and gutters free from paper and rubbish. We can make our home beautiful by planting trees and flowers and keeping the grass mown. Our sheds can be made attractive by whitewashing them and planting and training vines over them. To promote the healthfulness as well as the beauty we must keep the gutters open and throw all waste and garbage at a safe distance from the house.

If we are going to endeavor to make Essex beautiful we must organize as a body and war against a common dumping ground. In fact I think the children of Essex School should form a "Junior Civic League," for the following purposes:

1. To keep Essex free from dumps. 2. To plant trees along highways. 3. To suppress all obscene and unsightly advertisements. 4. To help keep Essex free from saloons.

If we should succeed in carrying out our plans the better class of people will build homes in Essex; the town will build up rapidly; the churches and school improve and grow; the older people would become interested and form a society for improvement. Our town will then be a beautiful and ideal place in which to live.

ESTHER BOLLACK, *Secretary.*

GARRISON SCHOOL

The second meeting of the Junior Children's Aid Society of Garrison School was held on Friday afternoon, December 14, 1917, at 2:30 o'clock.

We had Miss Smith, the principal of the Garrett Heights School, and two of her pupils come out and talk about the activities of their organization.

Program:

I. A talk by Chassie Loomis and Margaret Evans of the Garrett Heights School.

II. Our members discussed:

a. Care of the teeth..... Robert Warfel

b. A plan to clean up Tobins..... Donald Pearce

We had Rose Knott illustrate the proper way to clean the teeth.

Charles Beck motioned that the secretary write to the Chattolonee Water Company and have the place cleaned up around the warehouses and station which they occupy.

It was motioned by Charles Beck to get "School Zone Signs" to be put up near the school, so that automobiles would slow down for the protection of the children.

We gave a rising vote of thanks to the Garrett Heights pupils, then we sang "The Star Spangled Banner." A motion for adjournment was given, and the meeting was then adjourned.

GLADYS MARKLEY, *Secretary.*

A TYPE CONSTITUTION

(Framed and Adopted by the Catonsville High School)

ARTICLE I.

Section I. We, the students of the Catonsville High School, in order to better civic conditions and render aid to the needy of the community, do ordain and establish this Constitution of the Catonsville Branch of the Maryland Children's Aid Society, founded in A. D., one thousand nine hundred and sixteen.

ARTICLE II.

Section I. All pupils from the Fourth Grade up, upon payment of the annual dues of ten cents ($.10), shall become active members of this organization.

Section II. All members are entitled to a Membership Card.

ARTICLE III.

Section I. Officers of the said organization shall be President, Vice-President, Secretary, Corresponding Secretary, and an Executive Committee, composed of the above officers and two of the Faculty.

Section II. The officers shall be elected by ballot by the active members for a term of one school year.

Section III. The President shall be elected from the Fourth Year.

ARTICLE IV.

Section I. The President shall preside over all meetings, act as ex-officio member on all committees, preserve order, announce the results of elections and all other votes; in case of a tie, cast the deciding vote; fill vacancies; authorize the appointment of all committees and the payment of all bills; have the Constitution read at least once during his term.

Section II. In the absence of the President, the Vice-President shall perform his duties. He shall post the program of each meeting; and with such persons as he may select, form a committee of courtesy, which shall welcome all visitors.

Section III. The Secretary shall record the proceedings of all meetings; read the minutes of the preceding meeting, upon the approval or correction of which, he shall record the same in a book provided for that purpose; he shall also record reports of officers and committees in said book.

Section IV. The Corresponding Secretary shall receive and send out all communications of the Society.

Section V. The Treasurer shall take charge of and be responsible for all funds belonging to the Society and due the Society, and keep all account of all receipts and disbursements; pay all orders drawn upon him by the President; present a monthly report of the condition of the treasury. At the expiration of his term, he shall turn over all documents and funds belonging to the Society to his successsor.

Section VI. The Executive Committee shall advise in all matters pertaining to the Society.

ARTICLE V.

Section I. Regular meetings shall be held on the morning of the last Friday in each month. Special meetin s shall be called by the President, subject to the direction of the Executive Committee.

Section II. The Program Committee shall be appointed at each regular meeting to arrange a program for the following meeting, and no member shall serve on said Committee for two consecutive meetings.

Section III. The program arranged by the said Committee shall be submitted to the Executive Committee for approval and subject to change by it within two days after said program is submitted.

Section IV. The said program shall be posted not later than twelve (12:00) noon on the Monday preceding the meeting.

ARTICLE VI.

Section I. Each class shall appoint two members to represent it in all matters of mutual concern.

A Dramatization—A Visit to Towson Courthouse

(*N. B.—The following play shows how a civics topic can be worked up as a project that correlates with the English of the grade. The first two acts were written by Miss Lula Fox, a fifth grade teacher in the Garrett Heights School at Hamilton; the last act was written by the pupils of her Grade. It shows how difficult civics material may be made concrete to young children. The play was presented at a school assembly and at a Patrons' Club Meeting.*)

ACT I.

THE HAMILTON IMPROVEMENT ASSOCIATION

Place—Hamilton Hall.

Characters—Mr. W. H. McCallister, J. H. Perry, August Famme, T. J. Thompson, Herbert Schmuck, Henry P. Mann and George J. Miller, all members of the Association.

Mr. Perry—We are the Hamilton Improvement Association. This gentleman (pointing to Mr. McCallister) is Mr. Wm. H. McCallister, our president.

Mr. McCallister—(Pointing to gentlemen in return) These gentlemen are Mr. J. H. Perry, our vice-president; Mr. August Famme, our secretary; Mr. T. J. Thompson, our financial secretary; Mr. Herbert Schmuck, our treasurer, and Mr. Henry P. Mann and Mr. George J. Miller, members of our executive committee.

Well, gentlemen, what new business have we for tonight?

Mr. Thompson—How about those fire plugs, Mr. President? Don't you think it about time we were asking the County Commissioners to provide us with some more? Our town has grown so fast of late that the twenty-one plugs we have are far from being adequate. How would you advise us going about getting more?

Mr. Schmuck—While we are looking after fireplugs, why not ask for more hose? We need additional hose more than the extra fire-plugs. So don't forget that.

Mr. Famme—Well, it is very good to have plenty of fireplugs and hose, but it seems to me we need more lights on some of these dark avenues worse than fireplugs and hose, so put them in also. We may escape a fire for some time but these dark streets are with us always.

Mr. Perry—True indeed. While we are asking we might as well ask for much as for little, so Mr. President, suggest a plan to secure all these things.

Mr. McCallister—Well, gentlemen, the way to get these things is to so pester the County Commissioners that they will be glad to give them to us to get rid of our asking. The proper thing to do is to send a delegation to Towson to wait on the County Commissioners and ask for what we want. If we do not get them by the first asking go again and again, until they give us what we want.

Mr. Mann—I agree with you, Mr. McCallister, and move that a delegation, with the president as chairman, be appointed tonight to wait on the County Commissioners, and ask for these things

Mr. Miller—I second the motion.

Mr. McCallister—You have heard the motion, all in favor say "Aye."

All Aye.

Mr. McCallister—Opposed say "No."

(No response.)

The motion is carried. I appoint Mr. Famme, Mr. Thompson, Mr. Schmuck and myself a committee to wait on the County Commissioners at their next meeting, and ask for these things.

All in favor of the meeting adjourning say "Aye."

All "Aye."

Mr. McCallister—Opposed say "No."

(No response.)

The meeting will now adjourn.

ACT II.

THE COUNTY COMMISSIONERS' OFFICE

Place—Office of Commissioners of Baltimore County, at Towson.

Characters—The five County Commissioners, their clerk and delegation from Hamilton.

Mr. Coghlan—We are the County Commissioners of Baltimore County. This is our office at Towson. I am Mr. Coghlan, President of the Board. Gentlemen, will you introduce yourselves?

Mr. Yellot—I am George W. Yellot.

Mr. Rittenhouse—I am Mr. Rittenhouse.

Mr. Schlee—I am Andrew Frederick Schlee.

Mr. Bosley—I am William P. Bosley.

Mr. Coghlan—This gentleman is our clerk, Mr. Hugh Gallagher. Well, gentlemen, we must get down to business right away. We have so many things to attend to there is no time to waste. I understand there is a delegation from Hamilton coming over today to ask for a number of things. Mr. Yellott, we will let you talk to them as they are from one of your districts.

Mr. Yellott—Very well, I will try to satisfy them. But I do hope Mr. McCallister is not with them. He is so hard to put off. There they are now.

(Enter delegation. Mr. McCallister in the lead. He greets Mr. Yellott very cordially).

Mr. Yellott—Well, Mr. Mac, what do you expect us to give you Hamilton people today? Don't you think you are pretty well cared for? With the extra help we are giving you for your fire department and lights, and the State Roads Commission widening your road, you ought to feel that you are the favored few.

Mr. McCallister—Well, we don't feel that way. We are here today to ask for more fire plugs and lights. These gentlemen can tell you how badly they are needed.

Mr. Famme—Indeed we can. Our towns of Hamilton and Lauraville have grown so fast of late that the twenty-one fire plugs afford us poor protection. Only last month the homes of Mr. Townsend and Mr. Horn burned to the ground because there were no fire plugs nearer than one-half mile. We feel sure you wish to do better by us than this.

Mr. Rittenhouse—But, gentlemen, you have put the matter off too late. All of the money of 1916 is spent, and we cannot possibly do anything for you until the levy for 1917 is made.

Mr. Thompson—Will you promise to help us when the new levy is made and you have the money.

Mr. Schlee—I think the matter should be left in the hands of Mr. Yellott, as it is one of his districts represented, and the money should come from the sum appropriated for that district.

Mr. Bosley—Yes, this is Mr. Yellott's affair. I am sure he will treat you right.

Mr. Yellott—Well, I think I can promise a few fire plugs, and lights during the year of 1917, and will put you down among the first to be served. But I want you to understand that you are getting the full amount of your taxes spent right at Hamilton and Lauraville. The taxes collected in your community amount to about $27,000, and our clerk will give you a few figures to show just where you stand.

Mr. Gallagher—Will you write this down—$27,000 received for year 1916.

Paid back to you as follows:

Garrett Heights School	$18,300
2 policemen at $70 per month	1,680
21 fire-plugs at $25	525
175 lights at $35	6,125
Fire Department	1,000
	$27,630

Besides I have not mentioned your roads. Look what you receive for them.

Mr. McCallister—But see what fine citizens you have at Hamilton and Lauraville. You should be proud to have such good citizens in your county.

Mr. Yellott—Yes, you people of Hamilton and Lauraville are a pretty fair class of citizens, but you have one or two delinquents in your midst. Just go into the Juvenile Court and hear the case being tried there today.

Mr. McCallister—We will do that, but don't forget to keep your promise about those little extras. Good day.

Act III.

The Juvenile Court

Place—In Juvenile Court Room in the Court House, at Towson.

Characters—Judge Duncan, his clerk, Miss Johnson, the probation officer; Mr. Hershner, Chief School Attendance Officer; Robert Coblentz, truant boy; his father, John Coblentz.

Judge Duncan—(calls) John Coblentz. (John Coblentz walks to Judge's desk); Robert Coblentz (Robert Coblentz walks to desk and stands by father). Take this oath, Mr. Coblentz.

(Clerk administers oath to Mr. C.)

Judge, continuing—Mr. Coblentz, we have a charge here against you, saying that you have not been sending Robert to school regularly this year. Have you anything to say in the matter?

Mr. Coblentz—Your honor, I kept my boy home. I thought as he was my child I had the right to keep him home when I pleased. I go to work early and do not get home until late and need him to look after things.

Judge (to boy)—Robert, have you anything to say?

Robert—I don't like school anyway, and my father said I could stay home.

Judge—Mr. Hershner, will you report how many days Robert has been in school this year?

Mr. Hershner—The record shows that Robert has been in school only 5 days during the month of February, and only 20 days since last September.

Judge—Mr. Hershner, have you notified Mr. Coblentz that Robert has not been attending school regularly?

Mr. Hershner—Your Honor, I have notified Mr. Coblentz several times and explained the law thoroughly. But it seems as if he would not obey.

Judge—Miss Johnson, have you anything to say concerning Robert?

Miss Johnson—I saw Robert on the street smoking, and heard him swearing. I told him he ought to go to school, but he was very impudent and said his father told him to stay home.

Judge—Mr. Coblentz, you have heard the reports of Miss Johnson and Mr. Hershner concerning your son. Have you anything more to say for yourself?

Mr. Coblentz—No, sir.

Judge—You know the law, do you not?

Mr. Coblentz—Yes, Sir.

Judge—Mr. Coblentz, you are guilty of unlawfully keeping your boy from school and I fine you $25. You must send Robert to school regularly or we will take him from you and send him to St. Mary's Industrial School.

Robert, will you go to school now and try to help your father out?

Robert—Yes, Sir.

Judge—Call the next case.

As all walk out of room members of Hamilton Improvement Association are heard to explain:

"He is indeed a disgrace to Hamilton, and we do not want such men in our community."

How Donations of Food, Clothing, and Supplies Contributed by the Junior Children's Aid Society Have Been Used

(N. B.—To get the complete idea of the organization the work of the children alone will not suffice, so we are including here the report of the Directors for the Baltimore County Children's Aid Society. It will show better than anything else how the schools are contributing to the work of the parent association.)

To me it is a remarkable record that nearly all of the Junior Children's Aid Societies, in addition to their membership dues, have given donations of clothing, food, toys and supplies. Some Societies have repeated these donations two and three times since October 1st. The Baltimore County worker does not know how she would have been able to meet the numerous demands upon the Society without this generous help from the Junior Children's Aid.

When Christmas of 1916 came around there were many children without the necessities required to make this day one of joyful celebration. Besides the many fine things that the Junior Children's Aid members did as individuals in their own

community, they furnished a bountiful Christmas for ninety-three children and thirty-five adults of food, toys and clothing. Needless to say these one hundred and twenty-eight individuals remember with true gratitude that in their distressing circumstances they were not forgotten.

Clothing and Food the Two Most Useful Gifts

Very frequently I am called upon to go into families where children are out of school because they lack shoes and clothing. If I had to buy these in every case the small funds at the command of the Baltimore County Children's Aid Society would not anything like go around. When I get such an application now, the first thing I think of are the supplies which the Junior Children's Aid Society have accumulated for distribution. Very often I do not have to spend a dollar. I do not know how much money this has saved during the past year, but I am sure it must be somewhere between one hundred and two hundred dollars.

Then, too, I have applications from families where some one is out of work or the wage earner is sick. I have found one family after another without food to keep them strong and well. When this has happened, I have always been able to use the food donated by the Junior Children's Aid to good advantage, and again have been able to save money to spend upon other important work that I have to do. The best thing about all these gifts of the Junior Children's Aid Society is that they have been voluntary, showing the civic and social responsibility felt by its members and so well expressed in the motto selected by "The Civic Sentinel," "Am I my brother's keeper?"

See The Junior Children's Aid Society Grow

The number of Junior Children's Aid Societies in 1916—twenty-three.
The number of Junior Children's Aid Societies in 1917—thirty-nine.
An increase of 16 organizations.
The number of members in 1916 was 1,984.
The number of members in 1917 is 3,580.
An increase of 1,596.

While the organizations and members have increased at such a gratifying rate, the effective work of the Junior Children's Aid Societies has also increased. Thus far this year the total number of unfortunate children helped by the Society has reached the splendid total of 228. Of this number, 38 were families referred by the compulsory school attendance department of the County. In these 38 families, there were 135 children.

Now that I have left the County to take up other work, I want to say to each member of the Society that I appreciate more than I can say your helpful interest and I sincerely hope that you will support the work done by Miss Louise Tilghman, my successor, in the same enthusiastic, helpful way that you supported me.

Mary Read Lucas,
May 1, 1917. County Worker.

Baltimore County Junior Children's Aid Society
Report for 1917–1918

The Baltimore County Junior "Children's Aid Society" was organized in 1915 for the purpose of interesting school children in the great problems underlying community welfare.

At the beginning of the scholastic year of 1917–1918 there were thirty schools already organized for Junior Aid work. Since November, Mrs. Cook and Mr. Hershner have visited ten schools, and talked to four hundred children, about how they could assist Baltimore County in the compulsory school attendance and Juvenile Court Work. There are now forty-one organized, with a membership of 3,728 children.

Donations of clothing, food, toys and the membership fees of ten cents have kept many of the Baltimore County children in school, well-fed, and clothed.

The boxes at Thanksgiving and Christmas were an enormous help and displayed plainly the sincere interest of both teachers and pupils. At Christmas forty-three

baskets were distributed, and thirty-two families received other presents. The problem of distribution was greatly assisted by members of the Boy Scouts Troops.

Through the assistance of the "Ladies' Aid Society" of the Towson M. E. Church all clothes donated by the Junior Children's Aid have been mended before they were distributed.

The membership fees of the Junior Aid have been used for the relief of school children. Seven children who were not able to attend school because of the lack of shoes, were supplied through the Junior Aid Funds, while two other children who were suffering for the want of glasses were also relieved through the same source. There are now being sent to the dentist each week, school children who will receive attention also through the Junior Aid.

The results from the physical examination made by the Public Athletic League Doctor are in many cases being referred to the Baltimore County Children's Aid. Wherever there is need for attention which cannot be given by the home the relief will be given through the Children's Aid, assisted by the Junior Children's Aid.

The following table gives the membership enrollment to date (May 31, 1918).*

(N. B.—Here followed a list of the forty-one organized schools. We have omitted the list because of space. The total membership is 3728 children.)

Signed,

MRS. ALBERT S. COOK *Chairman of the Educational Committee.*

FIFTH GRADE

There are some civic facts a Fifth Grade child should know. The accumulation of these facts may be incidental (but not accidental), growing out of current local happenings in the educational, social, business and political world. The facts should be reviewed whenever concrete instances are met that call them forth until they are fixed as a body of knowledge that the Fifth Grade child will carry on with him in life. Later, this knowledge of civics will become the basis for his reasoning about governmental matters when he assumes his burden of citizenship. It is just as important that girls know these facts as boys. The following questions are suggested as the basis for the work. *Definite specific instances in current life should be made the point of departure for the lessons. Evidences of the topic under discussion should precede the formulations. Ex.* [1] Reduction of the prices of gas and electricity will serve as a point of departure for the discussion of the Public Service Commission, [2] railroad rates, railroad accidents and telegraph systems for the Interstate Commerce Commission, [3] a piece of local road construction for the work of the Roads Commission.

Civic Problems for Fifth Grade Boys and Girls

I. What is the Public Service Commission of Maryland?
II. What is the Interstate Commerce Commission?
III. Give some evidence of local or county government.
IV. Give some evidence of state government in Maryland.

Ex.—Good roads, and road building in the community.

V. Give some evidence of national government in Maryland.

Ex.—Post-office, rural or otherwise.

VI. Baltimore County:

a. When was Baltimore County established? [1659, the sixth in the state.]

b. What is the present population of Baltimore County?

c. What is the governing body of a county?

d. Name the county commissioners of Baltimore County.

e. Where do Baltimore County commissioners meet to transact business? When? Ex.—A visit to the courthouse at Towson, or a newspaper account of a meeting of the county commissioners could become the point of departure for this information.

f. Besides the county commissioners for what other officers do the people of our county vote? Ex.—Election time will bring this out.

g. How many school children are there in Baltimore County?

h. How is the Board of School Commissioners appointed? How many members are there? Who are the present members of the Board? Who is our County Superintendent of Education?

i. What is the work of the school trustees? Name those in the local district.

j. Give evidences that the State Roads Commission is at work in your district.

VII. Some facts about State and Nation:—

a. What is the population of Maryland?

b. What is the population of Baltimore City?

c. Name and locate the six largest cities in Maryland.

d. Name the governor of the state.

e. Give evidences that you know Maryland has a Pure Food and Drug Law; and that the nation has a Pure Food and Drug Law. Example: Correlate this with "Foods" in the industrial arts course.

f. Who is the president of the United States?

g. Name the officers of his cabinet—the men who help him plan "Uncle Sam's business."

VIII. Local fire department.

IX. Local police department.

REFERENCE BOOKS: Hill, *Lessons for Junior Citizens*, a text for the grade; Richman and Wallach, *Good Citizenship*, a text for the grade; Dunn, *The Community and the Citizen;* Beard, Charles A., and Beard, Mary R., *American Citizenship;* Nida, *City, State and Nation*, Macmillan Co.; Moffett, *Careers of Danger and Daring;* Hill, *The Teaching of Civics*, Houghton, Mifflin & Co.; Keller, *Straight America;* Allen, *Civics and Health*, Ginn & Co.; Crittenden, *Uncle Sam's Business*, Harper's; Lapp, *Our America*, Bobbs, Merrill.

MAGAZINES: The Survey, The World's Work, Review of Reviews, The Independent, The Outlook, The New Republic, Publications of the Federated Charities Organization.

SIXTH GRADE

These topics should be treated concretely, a definite situation being presented either through an actual experience in which the school or the community participates or through a described situation in the daily newspaper:

I. Department of Health in Baltimore County, in Baltimore City.

Health and the schools.

Fighting contagious diseases.

II. Water supply:

Why has Baltimore County no water supply of its own?

How is Baltimore City supplied ?

Compare the supply of Baltimore City with that of New York City.

III. Milk supply and inspection.

IV. Immigration:

Naturalization.

V. Elections:

Make simple and vivid at the time of elections.

VI. Juvenile courts:

Compulsory school attendance touches the life of each child and a discussion of the Juvenile Court in County and City might proceed from this knowledge.

VII. Flies and disease a civic problem:

A detailed study, with attempts at producing practical results in the elimination of flies either in the school or in the community. The daily lunch box and its care might be the point of departure for this topic.

REFERENCES: Hill, *Lessons for Junior Citizens;* Richman and Wallach, *Good Citizenship;* Moffett, *Careers of Danger and Daring;* Dunn, *The Community and the Citizen;* Beard, Charles A. and Beard, Mary R., *American Citizenship*, Macmillan Co.; Hodge, *Nature Study and Life*, for the topic "Flies;" Bigelow, Maurice A., and Bigelow, Anna, *Introduction to Biology*, for the topic "Flies;" Hill, *The Teaching of Civics*, Houghton, Mifflin & Co.; Allen, *Civics and Health*, Ginn & Co.; Crittenden, *Uncle Sam's Business*, Harper's; Lapp, *Our America;* Bobbs, Merrill; Keller, *Straight America.*

MAGAZINES: The Survey, The Outlook, Review of Reviews, The World's Work, The Independent, The New Republic, Publications of the Federated Charities Organization.

SEVENTH GRADE

The following topics should be treated concretely, a definite situation being presented either through an actual experience in which the school or the community participates, or through a described situation in the daily newspapers:

I. Park Boards:
Parks [National and State].
II. Town Improvement Associations.
III. Conservation of Forests and Trees:
State Game Laws.
IV. Government construction of roads, canals, harbors.
V. State Government:
State taxation.
VI. Mosquitoes and disease—a civic problem.
VII. Organization of a Junior Civic League or a Junior Children's Aid Society.

REFERENCES: Dole, *The Young Citizen;* Hill, *Lessons for Junior Citizens;* Dunn, *The Community and the Citizen;* Allen, *Civics and Health,* Ginn & Co.; Crittenden, *Uncle Sam's Business,* Harper's; Gulliver, *The Friendship of Nations;* Hodge, *Nature Study and Life;* Bigelow, Maurice A., and Anna M., *Introduction to Biology;* Nida, *City, State and Nation,* Macmillan; Lapp, *Our America,* Bobbs, Merrill; Keller, *Straight America;* Hill, *The Teaching of Civics,* Houghton, Mifflin & Co.

MAGAZINES: The Survey, The World's Work, Review of Reviews, The Independent, The Outlook, The New Republic, Federated Charities Publications.

EIGHTH GRADE

Read "The Point of View," p. 577.

The following topics should be treated concretely, a definite situation being presented either through an actual experience in which the school or the community participates, or through a described situation in the daily newspapers.

I. The Peace Movement.
II. Schools:
Organization.
Officers—city, state, county.
Government schools.
Compulsory School Education.
III. State charities:
Asylums.
Almshouses.
IV. State penal institutions.
V. Department of Health and its campaign against tuberculosis. The State Sanitorium.
VI. The community and the citizen.
VII. The state government and the community.

VIII. The national government and the community.
X. The government of the city.
XI. The government of the state.
XII. The government of the nation.
XIII. How the expenses of the government are met.
XIV. Organization of a Junior Civic League [optional].

TEXT: Dunn. Community and Citizen.

REFERENCES: Beard, Charles A., and Beard, Mary R., *American Citizenship*, Macmillan Co.; Foreman, *Elementary Civics;* Foreman, *Advanced Civics*, Century Co.; Gulliver, *The Friendship of Nations*, Ginn & Co.; Dole, *The Young Citizen;* Lapp, *Our America*, Bobbs, Merrill; Keller, *Straight America;* Hill, *The Teaching of Civics*, Houghton, Mifflin & Co.; Crittenden, *Uncle Sam's Business*, Harper's; Nida, *City, State and Nation*, Macmillan; Allen, *Civics and Health*, Ginn & Co.; Bigelow, A. M. and Bigelow, A., *Introduction to Biology*, Macmillan, for the topic "Tuberculosis."

MUSIC

SUGGESTIONS FOR ALL GRADES

N. B.: For much of the material in this outline we are indebted to Mrs. J. C. Low (Henrietta Baker Low), recently Supervisor of Music in the Baltimore City Schools.

I. Aims and values:

1. Before music can be successfully taught, there must be a very clear understanding of its aims and values by all of those concerned in its teaching. Music properly taught ought to make for a better school spirit and a better community spirit, in that it involves the action of a concerted whole—the result being proportioned to the way in which school classes and community groups act as wholes, not as individuals. It is, therefore, an invaluable subject for the training of a "social conscience"—a civic spirit. With this as an aim no one may be excused from music—each individual must be taught to do his share in perfecting a group ideal. The subservience of the individual to the group cannot too early be impressed upon our American children, and the most interesting and concrete way to do it is through chorus-singing in the public schools. The material selected must voice the interests of the group; the methods of teaching must be as simple and human as may be, and individuals must be urged to high endeavor in order that the resulting expression may be *social* expression and not individual exploitation. Leaders must be developed, the weak trained to help themselves and thereby the whole; and organization and co-operation with other groups must be a feature of the work. In addition to this big aim, there are many secondary ones among which may be mentioned:

2. Secondary aims:

a. The cultivation of the musical and literary sense, with the *best* song literature.

b. The daily application of the principles of tone and enunciation to speech of any kind: recitations, reading, and ordinary conversation.

c. The breathing and posture demanded for correct singing *must* be made into *habits* of *living*—not merely music habits.

d. Opportunities for training in public behavior should be promoted by the music song-festivals.

e. The music must open an avenue of artistic enjoyment not only to the school-child, but to the homes connected with the school.

For this reason the school must encourage community choruses, community informal singing, people's orchestras, people's bands, etc.

f. The music should furnish the means to enlist the support and interest of churches and Sunday Schools, private and parochial schools, clubs, of all kinds; neighborhood organizations, moving picture parlors—in short, music offers the medium through which the community may act as a united whole.

g. A repertoire of good social songs must be taught in school and promulgated assiduously in the community through the co-operation of the agencies named in (f). This is one of the simplest ways to secure such co-operation.

II. A complete scheme of public school music should take into account the following factors:

1. The teaching of singing in the schools from the first grade through the high school; such teaching to apply to every child in every grade for the entire course and to include artistic rendition and sight-reading—the cultivation of taste to be paramount.

2. High school orchestras and glee clubs included in the music work. Instruments furnished if need be.

3. The teaching of instruments in the seventh and eighth grades in classes, by professionals. Instruments furnished if necessary.

Note. Children of these grades are at the best age for beginning the study of an instrument. If no other time can be found, those studying instruments might be excused from singing lessons at that time.

4. The crediting of music in the high schools so that talented children may not be put at a disadvantage through their music-study.

5. The giving of concerts by choruses of high school students in connection with a visiting orchestra. This to serve two purposes: interesting the students in orchestral performance, and interesting the neighborhood in the work of the schools.

6. Enlisting the co-operation of musical clubs and organizations in giving free concerts to school children or concerts at a minimum cost.

7. The finding of specially gifted children with the view of setting them in the way of earning a livelihood through their gift.

8. The formation of community singing classes and community orchestras outside of schools, to improve the community and the schools through the community.

9. Informal community singing at stated times under the jurisdiction of the school authorities.

10. The furtherance by school authorities of all efforts looking toward class organization and co-operation of all neighborhood agencies for the benefit of music.

11. People's music festivals, small and large, under the auspices of the school authorities.

12. A music bureau in connection with the supervisors' office, which shall issue reading matter, explanatory and suggestive in musical matters, and at the service of all for improvement of community music.

III. General points for class-singing efficiency:

1. In the first three years of school life it is not too much to expect that:

a. Monotones shall be eliminated.

b. A soft, light, high sustained singing tone shall be established.

c. An extensive repertoire of good songs (good English and good music) shall be known to the children.

d. Musical feeling for rhythm, the phrase, climax, etc., shall be established.

2. In Grades IV to VIII, inclusive, all the foregoing are to be expected in addition to simple sight-reading, with part singing in the sixth, seventh, and eighth grades. In these three grades, too, active participation in community music should be made a feature.

3. A habit of correct posture and breathing shall be established.

4. A relaxed jaw, making possible clear enunciation, shall be a habit; this habit to function in all spoken speech.

5. Simple, natural, solo singing shall be encouraged in every child.

6. A love for singing that will function outside the school should be the aim of the teacher.

TYPE PROGRAMS

SUGGESTED POSSIBILITIES FOR WEEK OF SONG. (February 17–23, 1918.)

1. Union of several classes each day for Assembly Singing, with relatives and friends invited, and *asked to join in singing*. Time, preferably, at end of school day.

2. Interest one pastor in the community, if possible, and urge him to get the others interested in a Union Service at one of the churches on some evening of the week. Churches can utilize their choirs, organists and assembly rooms without trouble. Use "Fifty-five Songs."

3. Ask each pastor to have one special song-service on the Sunday preceding the Week of Song and that they speak on that date of the value of song in worship, in the home, in the community, etc.

4. That all parties or home-gatherings of any kind, during that week, spend at least one half hour in singing.

5. Ask any social or musical organization in your neighborhood to give a song-party or concert during the week.

6. Write to "National Week of Song," care of Normal Instructor, Primary Class, Dansville, N. Y., for *prepared articles suitable for publication in your local paper (free of charge). Write at once.*

7. Arrange for a "Community Sing" in some big hall of the neighborhood. Have a chorus to lead, made up, if possible, of some or all of the Church Choir singers, and at least one hundred upper grade boys and girls. If desired, this chorus might sing one or two numbers alone, but their chief business should be to inspire all present to sing. Ask any violinists or musicians of the neighborhood to co-operate. Defray expenses of printing words or buying song books, etc., by a silver collection. Leader: Organist, choir singer, teacher, or musician of the neighborhood. Have some good public speaker make a *short* address at this meeting on a topic concerning the immediate welfare of the community (fifteen minutes, at most).

School Program

(Last twenty minutes of each day.)

Monday—Patriotic Songs:

1. America—three stanzas.
2. Battle Hymn of Republic—three stanzas (verse as solo or semi-chorus).
3. Columbia, Gem of Ocean—two stanzas (verse as solo or semi-chorus).
4. Dixie—one stanza (verse as solo or semi-chorus).
5. Yankee Doodle—three stanzas (verse as solo).
6. Onward Christian Soldiers—two stanzas (verse as semi-chorus).
7. Star Spangled Banner. (N. B.—See outline of October for stanzas used.)

Tuesday—Home Songs: (N. B.—Verses as solo or semi-chorus first.)

1. Old Kentucky Home—one stanza.
2. Old Folks at Home—one stanza.
3. Old Black Joe—one stanza.
4. Love's Old Song—one stanza.
5. Drink to Me—one stanza.
6. Nancy Lee—one stanza.
7. Home Sweet Home—one stanza.

Chorus may be repeated, so as to get an expression from all.

Wednesday—Songs of the Present:

1. Over There—one stanza.
2. Pack Up Your Troubles.
3. Joan of Arc.
4. A Vow—Modern Music Book 2, p. 159.
5. Down with Tyranny. (Copy.)

N. B.—If these are not known, this is a good time to teach them. If there is time, one or two "Requests" may be added.

Thursday—Songs of Our Allies.

1. God Save the King.
2. Rule Brittannia.
3. La Marseillaise (with following French phrases memorized):

Aux armes, Citoyens!
Formez vos bataillons!
Marchons! Marchons!
Qu' un sang impur
Abreuve nos sillons!

Friday—Children's Songs:

Group of children from one or several of the classes of grades 1, 2, 3, or 4, singing five suitable songs. Find at least *two* songs in which all present can unite.

PROGRAM FOR COMMUNITY AND SCHOOL IN CO-OPERATION

Friday, February 22nd, 1918 (or any suitable day or night.)

N. B. 1.—Night is suggested so that those employed during the day may take part.

N. B. 2.—Seat the leading chorus carefully so that they may really be of use in inspiring the audience. Take no one into this chorus who does not *know the words and relax his jaw.* The chorus should face the audience when singing.

1. *Patriotic Songs:*
   (a) America—three stanzas.
   (b) Battle Hymn of Republic—three stanzas.
   (c) Star Spangled Banner—one to four stanzas.
2. *Folk Songs:*
   (a) Annie Laurie—two stanzas.
   (b) How Can I Leave Thee—two stanzas.
   (c) Old Folks at Home—one stanza.
   (d) Kentucky Home—one stanza.
   (e) Old Black Joe—one stanza.
3. *Home Songs:*
   (a) Nancy Lee—one stanza.
   (b) Love's Old Song—one stanza.
   (c) Drink to Me—two stanzas.
   (d) Sweet and Low—one stanza.
4. *Address:* Suggestive Topics."
   (a) Food Conservation.
   (b) One Shovelful a Day Saved.
   (c) Motto of Camp Fire Girls.
   (d) Good Habits of a Citizen.
   (e) Who is a Good Patriot?
   (f) What is "Your Bit?"
   (g) War-Savings Stamps.
5. *Solo:* Voice or Violin,
   Simple and well done in preference to something elaborate.
6. Rule Brittannia—Chorus.
   La Marseillaise—Chorus.
   (Audience joining in as soon as it catches the chorus.)
7. *Present Day Songs:*
   (a) Over There.
   (b) Pack Up Your Troubles.
   (c) Joan of Arc.
8. A Vow. (Closing chorus).

THE CHRISTMAS PROGRAM

1. Use of Carols in School:

1. Make one class or one grade the choir, and the soloists responsible for certain selected portions of each carol, and use the whole assembly only for big effects. Variety in musical performance, light and shade is just as necessary as in dramatic performances. Include the neighborhood (the expected audience) in this early

planning and thru the news-letter let home folks know what you are planning and what their share is. The list of Carols to be sung, the records of them and the school plans should be in every home in the community not later than November 15th.

2. It possible have a school celebration with carols (school organizing, directing and taking leading part) and a community celebration with carols in which community organizations take the lead. Neighborhood musicians ought to arrange to provide vocal and orchestral help for this one and the largest hall should be used for the gathering of all the people.

3. Send a copy of the accompanying letter to each Sunday School Superintendent in your community; see that these letters are sent before Friday, November 15th. Enclose "Directions for use of Carols" and lists of records:

Superintendent's Name
Address.
Dear Sir:

This year we are planning to teach in.....school, six Christmas Carols taken from "Ten Traditional Carols" ($4.00 per hundred) and "Hark the Herald Angels," "O Come All Ye Faithful" and "Joy to the World," found in all hymnals. These carols should be known to all children because they have stood the test of time and are worthy of being committed to memory—both words and music. Would it be possible for you to arrange to use these same carols in your Sunday School Christmas service? We want, if possible to arrange for a big community celebration and if the carols were taught both at day school and Sunday school, we might be sure of having them faultlessly committed. We believe that school-teaching of the carols will lessen your labor in Sunday school and we feel that this close co-operation of day-school and Sunday school would add to good fellowship in the neighborhood.

If you have any wishes with regard to the performance in Sunday school that we might help you carry out in our day-school teaching we should be glad to co-operate.

May we have an answer before Friday, November 23rd?

Yours very sincerely,

N. B.—We enclose a copy of our report forms so that you may see how we are trying to make school music help the neighborhood. We send too, lists of records which may be used for learning the Carols.

II. Directions Concerning the Use of Carols at Home:

1. Let one of the language lessons be a letter to the family, telling something of the carol practice at school and what the object is. Let pupils also incorporate in the letter, the number and prices of the records which record the Carols. See that every family gets a letter the week of November 10th.

2. Give a short talk on the happiness of singing together at home. (To save repetition this might be done at the assembly.) People cannot sing together unless they know the same songs. Could the children teach words and music of the carols at home so that the entire families might sing? (Week of November 10th.)

3. Ask the children to learn the carols beautifully, so as to sing them to parents for a treat at the close of the day.

4. Appoint groups of not more than three children to visit all the old and sick people and sing the carols to them, if the people like. Young and old need each other.

N. B.—If the family wishes, they may sing from records of the first three (See November Outline).

Holy Night
First Noel
God Rest Ye
Good King Wenceslas

} These are especially good for singing around Xmas tree.

6. Again and again call the attention to the talking-machine records of our Carols. Suggest their use for family singing.

7. If the children are asked to sing at Christmas parties or entertainments, suggest that they use one or more of these Carols.

8. Suggest that they teach the carols to friends who do not go to their school, so that these friends may know the carols when the community comes together

N. B.—Keep the community affair constantly in mind.

III. Suggestions for Community Use of Carols:

1. Whenever possible send word to the clergymen of the neighborhood that the children are learning these carols, and ask that, if possible, some of them be used in the Sunday school and Church services.

2. Form a group or groups (at least twenty-five children in a group) selected from all grades, 5th, 6th, 7th and 8th, and ask them to go about the neighborhood singing their carols before the houses. A little judicious advertising might bring a candle in the windows of those who want singing. Ask people of the neighborhood to join.

3. Arrange, if possible, that the school and all neighborhood organizations combine to give a Christmas Community celebration. This is the biggest thing the school can do to make the music function in the Community; but getting the whole neighborhood to co-operate is a bigger thing than the singing.

4. Remember that self-direction is the aim you have in mind. Let your children suggest, plan, *work* for the Christmas celebration. *Do nothing for them that they can do for themselves.*

IV. Christmas Song Material:

1. Carols and Songs:

Ten Traditional Carols, ($4.00 per hundred) pp. 4, 5, 6, 10, 12, 13—and

Hark the Herald Angels
O Come All Ye Faithful
Joy to the World. } All Hymnals.

2. Records:

Records of the carols selected for the Christmas celebration of 1918. Use in school, home and community.

Of the nine carols to be sung, only six are recorded. These records are valuable for familiarizing one's self with words and music. The ones starred are unusually well rendered.

God Rest Ye
First Nowell
Silent Night } No. 31873 $1.00

*Silent Night No. 88138 $3.00 Schumann-Heink.

Hark Herald Angels
Silent Night } No. 17164 .75

Come All Ye Faithful
Joy to the World } No. 16996 .75

*O Come All Ye Faithful No. 74436 $1.50 McCormack, Male Chorus and Chimes.

3. Program of Victor Records for a Family Xmas Concert:

(1) Two old carols of the 16th Century Joseph Mine Lo, How a Rose e'er Blooming	No. 17870	$ .75
(2) Nazareth (Bass solo)	No. 35261	.75
(3) Holy Night (In French) Caruso	No. 88561	3.00
(4) Pastoral Symphony from Messiah	No. 35499	1.25
(5) Hallelujah Chorus	No. 31770	1.00

See also starred records.

4. A List of Records Suitable for Christmas Presents:

(a) *Patriotic:*

(1) America
Star-Spangled Banner } Werrenrath No. 45135 $1.00

(2) Dixie—Garrison No. 64637 $1.00
(3) La Marseillaise, Journet (French) No. 74039 $1.00
(4) Rule Britannia No. 16134 $1.00
N. B.—The first two are unusually good.

(b) *Hymns:*
(1) Lead Kindly Light—Baritone No. A-5766
Mixed Choir No. 16533
(2) Onward Christian Soldiers, Mixed Choir—No. 16419

FIRST GRADE

The following course offers the *minimum* of work and song-material. All musical effects must be gotten by imitation of the teacher who must teach by rote. If sight-reading is to be attempted it should be begun in Grade IV, using as simplest and least expensive the Congdon Primers Nos. I, II, and III, one of each of these books in children's hands.

I. Aims:

1. To establish light, head-quality of tone.
2. To establish breathing at beginning of phrases.
3. To cure all monotones.
(For directions write the Supervisor's office.)
4. To establish habits of position and attention. (Write the office.)
5. To establish habit of relaxed jaw in speaking as well as singing.
6. To secure clean-cut enunciation in singing, with an absolute avoidance of any sliding of voice from note to note; this clean-cut enunciation to be carried over into all spoken speech. Make it a *habit*, not a happening.
7. Greatest of all: To secure a *joy* in song-expression,—the foundation of all.

II. Desk books for teachers:

Primer: Modern Music Series, Silver Burdett & Co.
Primer: Eleanor Smith Course, American Book Co., N. Y.
Songs of a Little Child's Day, Milton Bradley Co.
Primer: Hollis Dann, American Book Co.

III. Song repertoire:

Modern Music Primer.
My Dolly, p. 12.
Pussy Cat, p. 30.
Squirrel's Tea, p. 14.
Time to Rise.
Apple Tree, p. 18.
Songs of a Little Child's Day.
Brave, p. 3.
Raining, p. 27.
Merry Wind, p. 33.
Softly Blows the Wind, p. 34.
First Bouquet, p. 41.
Slow Little Snail, p. 44.
Caterpillar, p. 45.
Cackling Hen, p. 50.
Lordly Cock, p. 51.
Bossy Cow, p. 54.
Saying Goodnight, p. 58.
Canary, p. 61.
Chirpings, p. 64.
Green Leafy Tree, p. 66.
Shell, p. 71.
Whirlabout, p. 79.
Fairy Dance, p. 80.
Play in all Seasons, p. 82.
Little Dancing Song, p. 85.
The Train, p. 86.
Echo Play, p. 88.
Christmas Time is Coming, p. 92.
Plums in Winter, p. 94.
Welcome to Spring, p. 95.
Face-Washing Song, p. 105.

Going to Sleep. p. 110.
Eleanor Smith Course Primer.
Dance Children Do, p. 9.
When Red Leaves Dance, p. 14.
Lady of the Moon, p. 21.
Snow in Town, p. 22.
Fairies, p. 29.
Christmas Pie, p. 31.
Santa Claus, p. 33.
Sing a Song of Holly, p. 33.
Favorite Colors, p. 34.
Hark! Hark! p. 38.
Rain Man, p. 40.
The Tug, p. 44.
Dancing with Rosa, p. 45.
Carpenter, p. 54.
Christmas Eve, p. 58.
Happy Rosina, p. 66.
Good Bye, p. 70.
Five Little Sisters, p. 79.
Diddledee Dumpty, p. 80.
In the Belfry, p. 81.
Spring Joy, p. 85.
In the Kitchen, p. 86.
In the Hammock, p. 90.
Little King Boggen, p. 91.
Morning Prayer, p. 94.
I Would Like a Fiddle, p. 95.

NOTE: If only one book may be had use Eleanor Smith Course Primer.

From time to time lists of songs, with directions for teaching, will be issued from the office.

Teachers' meetings will be announced.

SECOND GRADE

I. Aims: Same as for Grade I.

II. Desk-books for Teacher:

Modern Music Series, Primer, Silver Burdett & Co., N. Y.
Songs of Child World. Gaynor and Riley, Book I.
Song Primer. Alys Bentley. O. S. Barnes Co., N. Y.
Book I. Eleanor Smith Course. American Book Co.

1. Select suitable songs from the above books. Songs for children should relate to their immediate interests and should be short and definite. Avoid long songs and songs with unusual and difficult intervals.

2. Pitch songs high; sing with strong rhythm, rather quickly and always softly.

3. Have all children sing a few words alone; do this especially, every day, with children who are timid or unmusical.

4. Read carefully the introduction to the Music Course and with the idea of co-operation in mind begin a weekly song-rehearsal in which two classes combine to produce a musical good time.

THIRD GRADE

I. Desk-books for Teachers:

Lyric Music Series, Book I. Scott, Foresman Co., Chicago.
Songs of Child World, Book I.
Modern Music Series. Primer. (Select Songs from the Rote List.)

II. Read Aims for Grade I, and directions under Grade II.

FOURTH GRADE

Desk-books for Teachers:

Modern Music Series. Book I. Silver, Burdett & Co., N. Y.
Eleanor Smith Course. Book I. American Book Co., N. Y.
(Use Rote Songs in last section of book).

NOTE: Directions same as for previous grades.

THIRD AND FOURTH GRADES

A List of Songs

Modern Music Primer.
Dancing Song, p. 23.
Snowy Day, p. 55.
Jacky Frost, p. 80.
Apple Tree, p. 18.
Young Musician, p. 21.
Little Elf, p. 92.
Book I. Eleanor Smith.
Going to Grandmother's, p. 101.
Xmas Song, p. 105.
Soldier, p. 55.
Modern Music Series. Book I.
Dancing Song, p. 23.
Pussy Cat Mew, p. 45.
Riddle, p 18
Six Little Mice, p. 43.
My Lady's Garden, p. 76.
Mother Goose Lullaby, p. 78.
The Shell, p. 64.
Marching Song, p. 30.
Merry Go Around, p. 25.
Dancing Song, p. 22.
Springtime's Coming, p. 41.
The Star, p. 51.
Oriole's Nest, p. 72.
Ladybird, p. 102.
Naughty Brooklet, p. 112.
Winter Song, p. 114.
Squirrel's Thanksgiving, p. 124.
The Drum, p. 116.
Come, Dear Children, p. 47.
Raindrops, p. 31.

FIFTH GRADE

I. Desk-book for Teachers:

Modern Music. Book II. Silver, Burdett & Co.
Eleanor Smith Course. Book II. American Book Co.
Progressive Music Series. Book II. Silver, Burdett & Co.

II. Aims:

1. To establish light, head-quality of tone.
2. To establish breathing at beginning of phrases.
3. To cure all monotones. (For directions write the office.)
4. To establish habits of position and attention (Write the office.)
5. To establish habits of relaxed jaw in speaking as well as singing.
6. To secure clean-cut enunciation in singing, with an absolute avoidance of any sliding of voice from note to note; this clean-cut enunciation to be carried over into all speech. Make it a ***habit***, not a happening.
7. Greatest of all—to secure a *joy* in song-expression, the foundation of all.

III. List of songs for chorus work:

1. Thanksgiving Song—Songs of Childhood. Gaynor, p. 67.
2. Morning Prayer—Songs of Childhood. Gaynor, p. 42.
3. When Morning Gilds the Skies (From Hymnals)
4. Christmas Bells. Modern Music Book II.
5. O How Lovely Is the Evening. (A round).
6. A Boat! A Boat! (A round.)
7. Goodnight to you all. (A round.)
8. My Old Kentucky Home.
9. Suwanee River.
10. Seeing Nellie Home.
11. Santa Lucia.
12. Love's Old Sweet Song.
13. America.
14. The Star Spangled Banner.

IV. Teachers' Directions:

1. Please watch position carefully whenever singing is done. Correct position means:
   a. Feet on floor squarely (if sitting or standing).
   b. Push back on seats of chairs as far as possible.
   c. Backs erect, *not touching chair backs.*
   d. Chest out.
   e. Head up.
   f. Eyes front.

NOTE: (a) Allow no stiffness of shoulders or arms in attempting to get good positions. The body is relaxed but the chest and back are not. The chest and back hold up the relaxed body. (b) Please be very strict in all these position points.

2. The following details are to be watched in all singing:
   a. Use a pitch pipe or instrument for pitching and pitch high.
   b. Rhythm. (Whenever possible let a movement suggested by something in the song, accompany the singing. For instance in the Thanksgiving Song, let the class pretend to use sickles and *swing* them rhythmically. Return to the movement whenever the rhythm is bad.)
   c. Precise intonation. (Allow no sliding of voice from note to note. Make each pitch clean and distinct.)
   d. Times and tunes. (Have them exact.)
   e. Tone. (Let it be soft, high, sustained.)
   f. Pronunciation. (Round vowels and clean cut consonants.)
   g. A relaxed lower jaw.
   h. Breathing deeply at every phrase.
   i. Interpretation. (Bringing out the meaning of the song.)

Read the suggestions, pp. 593–600, carefully. If sight reading is to be attempted it should be begun in Grade IV, using, as simplest and least expensive, the Congdon Primers No. I, II, III; one of each of these books should be in the children's hands.

From time to time, lists of songs, with directions for teaching, will be issued from the office.

Teachers' meetings will be announced.

SIXTH, SEVENTH AND EIGHTH GRADES

Since most schools have a small attendance in the upper grades it is well to combine Grades VI, VII, and VIII for music. *A book in the hands of these pupils is absolutely essential.*

Soprano should be sung by Grade VI. If there is a second part, assign it to Grades VII and VIII.

Boys with changing voices should sing a low third part, but these boys require almost weekly testing, so that their parts may be properly assigned. Allow no boy under twelve years to sing low.

If sight reading is to be attempted it should be begun in Grade IV, using as simplest and least expensive the Congdon Primers Nos. I, II, III. One of each of these books should be in the children's hands.

From time to time, lists of songs, with directions for teaching, will be issued from the office.

Teachers' meetings will be announced.

I. Aims:

1. To establish light, head-quality of tone.
2. To establish breathing at beginning of phrases.
3. To cure all monotones. (For directions write the office.)
4. To establish habits of position and attention. (Write the office.)
5. To establish habit of relaxed jaw in speaking as well as in singing.
6. To secure clean-cut enunciation in singing, with an absolute avoidance of any sliding of voice from note to note; this clean-cut enunciation to be carried over into all speech. Make it a *habit*, not a happening.
7. Greatest of all—to secure a *joy* in song-expression, the foundation of all.

II. Songs:

1. Book in children's hands, select Rote Songs from:
   Lyric Music Series No. II.
   Progressive Music Series, No. III.
   Alternate Third Book. Modern Music Series.
   Eleanor Smith Course, Book III.
2. List of songs for chorus work:
   a. Thanksgiving Song—Songs of Childhood. Gaynor, p. 67.
   b. Morning Prayer—Songs of Childhood. Gaynor, p. 42.
   c. When Morning Gilds the Skies. (To be found in church hymnals.) Substitute "All praise to God on High" for the words "May Jesus Christ be praised.")
   d. Christmas Bells. Modern Music Book II.
   Three rounds from Eleanor Smith Music Course, Book II.
   (1) O How Lovely Is the Evening.
   (2) A Boat! A Boat!
   (3) Goodnight to You All.
   f. My Old Kentucky Home.
   g. Suwanee River.
   i. Santa Lucia.
   j. Love's Old Sweet Song.
   k. America.
   e. The Star Spangled Banner.
3. Community song-books:
   For uniting with the community in singing, two song books may be used:
   Fifty-five Songs and Choruses for Community Singing. C. C. Birchard & Co.
   One Hundred Old Songs. Cable Co., Chicago.

III. Teachers' directions:

1. Please watch position carefully whenever singing is done. Correct position means:
   a. Feet on floor squarely (if sitting or standing).
   b. Push back on seats of chairs as far as possible.
   c. Backs erect, *not touching chair backs.*
   d. Chest out.
   e. Head up.
   f. Eyes front.

2. Allow no stiffness of shoulders or arms in attempting to get good positions. The body is relaxed but the chest and back are not. The chest and back hold up the relaxed body.

3. Please be very strict in all these position points.

4. The following details are to be watched in all singing:

a. Use a pitch pipe or instrument for pitching, and pitch high.

b. Rhythm. (Whenever possible let a movement suggested by something in the song, accompany the singing. For instance, in the Thanksgiving Song, let the class pretend to use sickles and *swing* them rhythmically. Return to the movement whenever the rhythm is bad.)

c. Precise intonation. (Allow no sliding of voice from note to note. Make each pitch clean and distinct.)

d. Time and tune. (Have them exact.)

e. Tone. (Let it be soft, high, sustained.)

f. Pronunciation. (Round vowels and clean-cut consonants.)

g. A relaxed jaw.

h. Breathing deeply at every phrase.

i. Interpretation. (Bringing out the meaning of the song.)

DRAWING: PRIMARY GRADES

The love of the beautiful is as instinctive as any emotion, and its cultivation is essential to the complete fulfilment of our personality. The aim of art instruction in the curriculum is to aid in "the expression of energy in terms of beauty" (Dow) by developing the esthetic side of the child's nature. "We want to open the eyes and minds of the children everywhere to the sunshine of beauty, to carry happiness and ideals into the hearts of young people, and into the homes from whence they come."—Munsterberg.

This may be done by developing appreciation through association with the beautiful. Within the realm of the school this means the unconscious influence exerted by good pictures upon our walls, by the shrine of beauty presenting its bit of color, arrangement and harmony, by placing in the hands of the children for closer observation pictures by great artists, and other works of art; by providing opportunity for expression in art mediums; by training children to exercise judgment through class criticisms, thereby increasing the capacity for enjoyment.

It seems important to introduce the children to a wide range of visual materials rather than to force the accuracy of observations in any one direction. The subjects for study are closely related to other subjects such as nature study, industrial arts, geography, history, reading and literature as well as to holiday seasons and activities in the home. This includes the seasonal coloring of plants and landscapes, the illustrations of dramatic incidents, the decorations of such articles as the children have occasion to make during the year, and a simple study of the great masterpieces which the children love.

With the younger children both material and method are adapted to their needs and ability, and the work is used mainly as a medium of expression through which ideas are clarified. In the first three grades the play spirit predominates, the mere joy of making things, or of trying to make them, and to make them beautiful as well. There is an attempt to make the work purposeful to the children by setting such problems as they can appreciate and accomplish. Spontaneous, joyous work results in original delightful representation. Later, as the children grow older, in the fourth grade, there comes a dissatisfaction with crude results and technique may be emphasized. Lessons in the main become perfunctory unless related to some project having permanent value as judged from the utilitarian standpoint.

The materials used are crayons, charcoal, chalk, scissors, paper, blackboard. The time devoted to drawing is one hour a week. In the first and second grades the periods may well be limited to twenty minutes each, giving three directed lessons a week. Much help may be given by means of blackboard sketches and pictures, but all such help must be removed while the children are drawing. Line drill for freedom of movement and light sketching should be frequent in all grades. A few minutes spent in this way at the beginning of the lesson is valuable. Large sheets of paper must be used for illustrative drawings. Aim to have nature drawings life size. The size and shape of the paper should fit the purpose of the lesson. An undirected seat exercise, similar in kind, should invariably follow the directed lesson. Drawing lessons should supplement other lessons whenever possible.

REFERENCES: Prang, *Text Books in Art, I, II, III, IV;* Bailey and Burrage, *School Sanitation and Decoration;* Caffin, *How to Study Pictures;* Coffin, *A Child's Guide to Pictures;* Dow, *Composition;* Van Dyke, *How to Judge a Picture;* Pater, *The Renaissance.*

FIRST GRADE

Drawing is a little child's delight and it is an easy step to pass from the unguided home efforts in graphic representation to the carefully planned work of the schoolroom. Closely correlated with all school activities as a natural medium of expression, and freely used in seat work it is an invaluable aid in clarifying and fixing visual images.

Imagination and imitation, two characteristics of this period, are allowed full sway in the illustrative or imaginative representation, the children handling crayon, charcoal, scissors and paper, and clay with enthusiasm and interest. Form being a most symbolic character in the expression of a first grade child, the teacher often works with the children helping them to get ideas of form, of proportion, and relation. Ideas of arrangement are given by illustration and suggestion. Some work with figures in mass is given and hints as to backgrounds are introduced. Children should work at the blackboard, freely using the broad side of the chalk. The aim is to keep the children alive, alert, joyous, securing originality rather than accuracy and precision in representation.

Children love to color pictures and to meet this desire hectograph copies and outline pictures from various sources are presented for coloring. Cuttings of flowers, birds, animals, houses, made by the children themselves, and children of older classes for them, may be colored.

In the illustrative work, black or brown crayola is preferable as a medium, since the child's love of color tends to distract his interest from the story representation and colors should therefore be used sparingly. Pictures in the text books should be studied for the pleasure that they give and for the art ideas they present.

Rhythm and color make a strong appeal to children of this age and these art principles based upon the early art instincts are applied in first grade work. Rhythmic borders are made with seeds and lentils, sticks, leaves and other nature units, repeated in drawing or cutting, mounted upon cards or used in the decoration of little booklets. Patterns for the paper used in the doll house, for the trimming on the doll's dress; the Christmas tree on the Christmas card, and the Easter bunny on the Easter card, are simple and interesting problems.

Recognition and use of color forms the basis of interesting lessons in finding and matching colors. Color days, as "Yellow Day" in the autumn and "Green Day" in the spring, are productive of much enjoyment. Sense games developing close observation of color form are invaluable. Color cards arranged from collections made by children should be made.

Objective drawing is of necessity very simple, the main purpose being to cultivate observation and the record of *growth.* Specimens of grasses for first lessons are simplest and best, since no elements other than the one color and growth are present. The most important things to consider are great simplicity of models and the lines of growth. Represent growth in neutral tones, brown or black crayola, then follow by a lesson in which color is used to satisfy the child's love of color. In the outline which follows, models are suggested in each grade through which the same art principles are applied. Use the model suggested whenever it is available and do not encroach upon those selected for the succeeding grade.

Aim in every drawing for good size and good placing on paper. See that the paper is suited to the correct placing of the object. Give judicious praise, discouraging nothing save carelessness. Through class criticism upon good and poor work train children to exercise judgment. In distribution and collection of material, reduce waste of time and energy to a minimum.

Time allotment: Drawing and Industrial Arts will alternate. Period: 30 minutes per day or 150 minutes per week.

SEPTEMBER

Color:

Discover through conversation what children know about color. Lead them to note color in flowers, fruits, trees, birds, fields, bubbles, etc. Encourage them to

bring in examples of colors—bits of anything that show good color. Make cards or charts showing color tints and shades. Introduce box of crayons; colors, method of handling. Plan a "Yellow Day."

Illustrative:

Interest children in looking at pictures in text books.

Let the first drawings be undirected and from memory of familiar plays and incidents. Teach correct position and necessity for moving whole arm in drawing.

Make blue sky and green fields. Illustrate in cutting and drawing nursery rhymes, games, plays.

OCTOBER

Objective:

Give class instruction on painting a large specimen from nature, showing pupils how to proceed with work. Aim for good size and placing, and simple expression of growth. Two lessons with each, if necessary—first in black crayon, second in colored crayon for greater interest. Grasses are suggested. Plan a "Red Day" following same plan used in September. Prang, *Art Text Book, I*, pp. 16–17.

Illustrative:

Study good spacing for sky and ground; illustrate by pictures. Use blackboard. Study tree shapes—cut and draw from memory, and from pictures. Teach massing figures. Show by blackboard sketches—many quick sketches of figures in action. Aim to place things where they belong—in the ground, in the air.

Drill on parts that go to make up the story-telling picture, i. e., sky, land, water, trees, pose, etc.

Home and school experiences told in picture stories. *Art Book, I*, pp. 8–9.

Design:

Use of crayon for fine lines and broad stripes.

Seatwork: Border designs with sticks, lentils, seeds, leaves, etc.

Picture-study:

Millet, Jean Francois: Feeding Her Birds.

NOVEMBER

Objective:

Autumn vegetables, selecting large specimens; pumpkin, carrot, potato. Two lessons: first in black or brown crayon: second, in color. *Art Text Book I*, p. 19.

Illustrative:

Cut and draw bare trees. Landscape with autumn foliage and bare trees. Practice figures in action from life—running, walking, jumping, stooping, etc., always, before an illustration, but do not have figures copied. Thanksgiving scenes. *Art Text Book*, pp. 10–11.

Design:

Border, with seeds or leaves for booklet. Borders with simple repeat of units, as aster, leaves, apples or pumpkins, in drawing or cutting for Thanksgiving booklet. Two lessons at least, for booklet. Tie with harmonizing colored cord, or raphia, or use fasteners.

DECEMBER

Objective:

Show pictures of evergreens. Cut, draw, paint shapes of evergreens. The evergreens may be cut, for shape, then drawn with colored crayon, planning the result to decorate a gift. *Art Text Book, II*, p. 10.

Illustrative:

Winter landscape: use gray paper. Cut the evergreen from paper and mount

Christmas stories: Santa Claus and his Sleigh, Going Shopping, etc. This will be accomplished as seatwork.

Design:

Use the simple spot suggested by the holly berry. Apply to a booklet or Christmas card. Use the evergreen tree to decorate a Christmas card. *Art Text Book I*, p. 58.

JANUARY

Objective:

Memory-work,—toys and holiday experiences. Find pictures of toys in books. and get better ideas of form. Draw or cut toys from memory pictures. Study sphere, cube, cylinder. Draw one face of each. Blackboard sketching of circles. lines, and loops. *Art Text Book I*, pp. 40–41.

Illustrative:

Suggested by daily lessons. "Playing with Toys."

Design:

Make a cold-wave signal. Make a border of circles; use two colors.

FEBRUARY

Objective:

Trees in winter: Observe growth, drawing only large branches. Study pictures of bare trees, and draw from memory. Study pictures of animals. Cut and draw animals studied. Cat, dog. *Art Text Book I*, pp. 34–35.

Illustrative:

Figure sketches: massing figures, always preparing for the illustrative work by sketches at blackboard by children. Illustrate in expressive action stories related to lessons of the month. Landscape: winter tree, division of space and size emphasized. *Art Text Book I*, pp. 28–29.

Design:

Make valentines, applying some principles of decoration previously given, as the simple spot, line or flower units. Avoid over decoration.

Picture-study:

Adam, J. The Cat Family.

Meyer von Bremen. The Pet Bird.

MARCH

Objective:

Signs of spring: bulbs, bare trees, budding branches. Study the buds and new growth. If possible have several drawings made from some twigs, watching the growth. *Art Text Book I*, p. 25.

Illustrative:

Windy weather: "A March Day."

Pose—child in action. Animals in action. *Art Text Book I*, pp. 30–31.

Design:

Square and circles used. Draw a border of circles, or squares with crayon, emphasize spacing. Use two colors. Book cover: Use border of cut units, as umbrellas, squares, circles, or cats. Teach careful spacing. *Art Text Book I*, p. 58.

APRIL

Objective:

Sprouting bulbs, branches, pussywillows. Several drawings, changing positions. Use black and colored crayons. Spring flowers: bluet or anemone. Vegetables: radish. Repeat in seatwork. Plan a "Green Day" similar to the "Yellow Day" in the autumn. *Art Text Book I*, p. 22.

Illustrative:

Spring occupations and sports. Cut objects used in gardening; in rainy season.

Designs:

Draw a border suited to a towel, rug or curtain for a doll house. Draw a pattern for a weaving mat. Line drills. Teach tying the booklet.

Picture-study:

Landseer, Edwin. My Dog.

MAY AND JUNE

Color:

Review color lessons. Color red, yellow, and blue squares; green, orange and purple oblongs. Match the color in flowers, grasses, and other objects.

Objective:

Spring flowers, grasses and leaves. Avoid mincing work; do not draw crossed stems. Make a spring flower booklet containing three or four drawings of flowers. *Art Text Book* I, pp. 31, 46, 47.

rative:

Spring and summer sports; Mayday. Flag-day; what you would like to do in vacation. Spring landscape, and a summer landscape. Circus parade. *Art Text Book* I, pp. 26, 62.

Design:

Borders; with triangles, lines, and simple flower units, as daisy or dandelion. Book covers for June work.

SECOND GRADE

In the second grade, the problems are of much the same character as in the first year, differing more in subject-matter and in variety of shape and arrangement than in art principles. Color is emphasized here as in previous grades. Color days may be continued when studying primitive life. Colors used for dyeing and decorating cloth, baskets and ornaments will be reproduced upon clay models, in simple rugs and other articles.

Rhythmic work, or simple design with lentils and sticks may be continued. Spots, lines and animal and plant units are used to decorate booklets for school work, and Christmas and Easter cards. These may be made with crayon, water color, or applied cuttings.

Emphasize practice for free arm movement, correct position, and easy pencil holding.

The illustrative work based upon childish experiences, home life, and primitive life is continued with special emphasis upon proportions as well as *good placing* of things in the picture. The landscape background is presented along very simple lines and it is used as the background for some game or story to be illustrated. Here as in first grade, the illustration is made in brown or black crayon, as color tends to distract attention away from form and position. If introduced, it should be used sparingly.

Nature models should be kept simple for objective drawing, and usually each child should be provided with a specimen; parts which children cannot successfully sketch should be removed. The *line of growth* is the most important consideration; this includes representation of stem and the manner of growth upon the stem. Teach children to *observe* and then record the result of their observation. Suggestive models are listed for each grade, and while others may be used which involve no greater difficulty it seems advisable not to encroach upon those of the succeeding grades. Work first for observation of growth, record in black or brown crayon, then follow with a lesson in color to add interest. In this grade the directed lesson in objective work should be followed by seatwork upon the same or similar model.

The blackboard or paper should be used freely by the teacher to illustrate methods of handling the crayon or water color, to show what she sees at certain points, but upon no account is the work to be copied by the children as this prevents the exercise of observation so much desired.

Pictures in books, on the wall and small copies obtainable from picture companies should be studied for the enjoyment they give, and incidentally for art appreciation. Free hand cutting of simple objects, and to illustrate stories in reading and literature needs emphasis. As a means for utilizing seatwork to worthy ends posters of scenes in modern and primitive life should be made from cuttings.

Practice for free arm movement, correct position and easy pencil holding is essential. Blackboard work by the children in illustrative and object work should be encouraged.

Aim in every drawing for good size and good placing on paper. See that the paper is suited to the correct placing of the object.

Give judicious praise, discouraging nothing save carelessness. Through class criticism of good and poor work of the class, train children to exercise judgment.

In distribution and collection of material reduce waste of time and energy to a minimum.

Time allotment: Drawing and Industrial Arts will alternate. Period: 30 minutes per day, 150 minutes per week.

REFERENCES: Prang, *Art Text Books I and II.*

SEPTEMBER

Color:

Lead pupils to talk about colors observed in fields, flowers, trees, sky, etc., and recall what they learned about color in the previous grade. Encourage them to talk about beautiful things they have seen.

Review standard tints, and shades, and teach browns and grays when needed. *Art Text Book II*, pp. 54–56.

Illustrative:

Make landscape, blue sky, green fields, showing middle distances or bushes entirely from memory or imagination. Mass figures as in first grade and precede lesson with minute sketches at blackboard. Give constant drill on the parts that go to make up a story-telling picture, e. g., sky, land, water, trees, road, pose, etc. Illustrate daily lessons, using charcoal and crayons. *Art Text Book I*, pp. 6–8.

October

Objective:

Sedges, seed pods, milkweed, rosehips, or aster. Have as many models as possible. Study growth and color and emphasize good size and placing of the drawing. Repeat lessons in seatwork. Use black or brown crayola, then repeat in color. *Art Text Book I*, p. 16–18. *Art Text Book II*, pp. 16–19.

Illustrative:

Notice changes in color during the autumn. Study massed effect of distance in nature, and from pictures, and paint a landscape, showing only sky, ground, and distant woods. Try for October color.

Draw and cut trees with foliage; apply to landscape. Pose (minute sketches). Figure sketches in game or story. Illustrate incidents from school and home life, and from the history and literature. Emphasize good proportion as well as placing of objects in the picture. *Art Text Book II*, pp. 4–7.

Design:

Recognition and simple description of type solids. Draw one face; hemisphere. Cut circle and semi-circles. Use in border designs. Use flower unit, as aster, dandelion gone to seed, milkweed seed, in a border for booklet. Line drills—fine and broad lines with crayon or brush. *Art Text Book II*, p. 51.

Picture-study:

Dupre, Julien. The Mowers.

Breton. The Gleaners.

November

Objective:

Autumn vegetables with foliage when possible; carrot, turnip, onion. Fruits, nuts, suggested by Thanksgiving time. Paint a pumpkin. Paint it large for shape and color, and then small enough to use in decorating a booklet cover. *Art Text Book II*, p. 66.

Illustrative:

Thanksgiving stories and poems. Blackboard drill on pose, trees, houses, and animals, using action lines. Make an autumn landscape with a tree in autumn tints. *Art Text Book I*, pp. 1–8.

Design:

Draw border design, using lines or spots as units.

Line drills.

Make Thanksgiving Booklet, enclosing previous drawings. Emphasize space relation. Use pumpkin or turkey as a unit of design. *Art Text Book I*, p. 58.

December

Objective:

Study shapes of evergreens from pictures. Cut and draw evergreen trees. *Art Text Book II*, p. 10.

Illustrative:

Study colors in sunset sky by showing pictures, by encouraging children to notice sunset colors in the sky. Paint a sunset sky. Plan a winter landscape with sunset sky and an evergreen in the snow. Repeat until successful. Winter landscape in three tones: white ground, gray sky, and dark tree trunks.

Design:

Apply the winter landscape or the evergreen tree to a book mark, a blotter cover, booklet, or card. Avoid over decoration. Teach children how to tie the booklet with raphia or appropriately colored cord.

JANUARY

Objective:

Toys and other simple objects drawn from memory. Blackboard practice of circles, loops, and straight lines. Toys drawn in mass at board. *Art Text Book II*, pp. 42, 43.

Illustrative:

Study the growth of a bare tree—plan for good placing of this tree in a picture, and make a good landscape. Use this landscape as a background, as a setting for outdoor games, as skating, coasting, snow-balling. *Art Text Book II*, p. 7.

Design:

Draw or trace three squares. Lesson in color blending; red and blue; blue and yellow; in two tones of gray. Cut squares and rectangles in proportion. Study pictures of objects like these shapes. Seatwork and board work.

FEBRUARY

Objective:

Objects connected with the daily lessons; soldier cap, a sword, a drum, a flag.

Illustrative:

Incidents of bravery of the heroes of the month, of winter sports and occupations. Always have sketches of figures in action before an illustration is drawn.

Design:

Valentines. Simple design, using lines, spots, simple flower units in good space relation.

Picture-study:

Herring, J. Village Blacksmith.

Renouf, E. The Helping Hand.

MARCH

Objective:

Look for signs of spring. Draw from twigs, bulbs, and bare trees, studying growth. Have several drawings of the same twig as it develops. Avoid crossing of stems. Select interesting specimens, but keep them simple.

Illustrative:

Pose, one minute sketches of children in action. Study animals. Sketch in same way in mass. What the wind does. "A March Day." *Art Text Book II*, pp. 22, 27, 54, 55, 38–39, 46–47.

Design:

Draw or trace three oblongs, make orange, green, purple. Use cuttings of animals, bulbs, bare trees for border designs.

Use buds, windmills, wind pictures, as units for border designs on booklets. *Art Text Book II*, p. 57–58

APRIL

Objective:

Spring flowers: buttercups, violets, opening buds, daffodil or narcissus, dandelion, umbrella, garden tools.

Illustrative:

Rainy weather picture. Show gray landscape; gray sky, grayer ground, and dark gray houses, fence, trees, etc. Use gray bogus paper as background. Spring occupations and sports. *Art Text Book II*, pp. 12.

Design:

Continue border and rosette designs with squares, circles, rectangles, or triangles.

Flower units, buttercup, dandelion, leaves, applied to book covers, to screen or other article for dollhouse. *Art Text Book II*, pp. 53, 61.

Picture-study:

Murillo. Children of the Shell.

MAY AND JUNE

Color:

Note color in landscape; leaves, and flowers. Compare with autumn colors.

Objective:

Spring flowers. Birds from memory, after observation and study of pictures. Things like the solids studied. Spring trees, branches of spring foliage.

Illustrative:

Spring landscape, spring and summer sports; May Day, Flag Day, and Fourth of July incidents; and other stories connected with school work or outdoor games.

Design:

Units of design suggested by flowers, by leaves, by seeds, from which children make border designs for book covers, containing drawings for the season. Borders with pressed flowers for flower booklet.

THIRD GRADE

The work of this grade marks an advance over the previous year in the more extended use of water color as a medium. Growth, proportion and arrangement have been considered and are continued with greater emphasis upon color and relation of objects.

The *near* and *far* relations are presented in many ways: in landscape, the appearance of the near tree, the tree in the distance; in nature or objective drawing, the relation of two objects, the one that seems nearer and its representation. Paper devices, without much formal discussion, are used to develop ideas of foreshortening, and to show relation of objects to each other.

In nature drawing specimens, still simple but interesting, should be in the hands of the children for close observation. Avoid crossed stems or crowding. A proper background is necessary. When a few models only are obtainable always place them up high before the children so they will get a side view which will give much more interesting results. Teach children to *observe*, then record what *they* see. Illustrations on paper or blackboard by the teacher to

indicate methods of handling the brush, and technique in drawing are valuable aids, but in no case is the work left for copy. Train children to note light and dark effects and try to represent them in a simple way. Remember that the size and shape of the paper should conform to the specimen, that proper placing is necessary, that greater exactness in representation of growth and color tones indicate progress. Children should mount drawings upon suitable backgrounds of harmonizing colors.

Illustrative work is continued as seatwork with free-hand cutting as well as sketching. Children in action are a special study in the third grade. Sports and games of children at home and abroad furnish rich opportunity for realistic work and are closely related to geography and history. Notebooks should contain occasional illustrations. More definite work is done with the landscape, with more attention to details in producing an artistic whole. Two tones, three tones in the landscape, light and dark, or shade and tint in nature drawing are emphasized. Color scales showing the colors used are made.

Posters made from cuttings and drawings that illustrate scenes from history, literature, or geography give opportunity for group work. Pictures in books, on the wall, and small pictures obtainable at small cost should be studied for the enjoyment they give and incidentally for art appreciation.

Rhythmic work or design comes in response to some felt need, as the decoration of some booklet of work, a Christmas card, an Animal Book as a gift for first grade children, or some other similar project. Units for rhythmic work are kept simple, growing out of flower or animal study, or suggested by the history or literature. Simple spots and lines made by using the brush and crayons are repeated in pleasing designs originated by the children. Also use units made by cuttings and by the use of simple stencils.

Aim to have every drawing large and free, avoiding all small, insignificant work.

Each directed lesson should be followed by an undirected seat exercise similar in kind.

Through judicious class criticism, train children to exercise judgment. Give judicious praise, discouraging nothing save carelessness. In distribution and collection of material, reduce waste of time and energy to a minimum.

Time allotment: Drawing and Industrial Arts will alternate. Period: 30 minutes per day; 150 minutes per week.

REFERENCE: Prang, *Art Text Book III.*

SEPTEMBER

Color:

Conversation lessons reviewing knowledge gained in previous grade. Teach pleasing combinations in arranging flowers in suitable dishes and vases for home and school decoration. Standards, tints, and shades. Use color scale. Stained glass effects to illustrate color blending. Use brush and wate color. Study "Out o Doors" chapters and pictures in *Art Text Book III.*

Illustrative:

Make a memory picture of some day in vacation.

Show pictures which illustrate good relation of sky and ground in the landscape.

Drill on parts of pictures: trees, rivers, ponds, roads, pose. Blackboard work with massed figures.

Design:

Line drills to teach use of brush, fine lines and large masses. *Art Book III*, pp. 1–5.

OCTOBER

Objectiv :

Flowers with foliage. Fruit on branch with foliage.

Single leaves—studying shape in several different positions—paint in silhouette.

Sedges—seed-pods, within vertical oblong. Study good arrangement for expression of growth, for size and placing on paper. Represent in charcoal, in brush and ink, or soft pencil. Repeat lessons until reasonable results are obtained. Cut and mount this drawing—lesson in mounting. *Art Text Book III*, pp. 15–20.

Illustrative:

Tree Study. Study special tree for proportion and outline, foliage masses, shape of trunk. Compare characteristic shapes of maple, poplar and an apple tree. Study pictures of trees. Block in with pencil one tree. Paint a tree from memory—brush and ink. Study autumn foliage in an October maple-tree; use colored crayon.

An "October" landscape: sky, ground, distant tree, and one near tree. *Art Text Book III*, pp. 4–7.

Design:

Use triangles and lines on Indian belts and head-dress, and other Indian ornaments.

Border design using tree study, or leaves, or simple flower, as units.

Art Text Book II, p. 53.

NOVEMBER

Objective:

Fruits, berries, seed-pods, rosehips, red peppers. Leaves, very simple branches of autumn leaves. Cut and mount these drawings, and use on cover of a booklet of fall work. Vegetables with foliage, use charcoal, brush and ink, crayon as indicated above. *Art Text Book III*, pp. 18–20.

Illustrative:

Thanksgiving. Have cuttings and drawings illustrative of costumes, habits, homes, before illustrating the story.

Emphasize the placing of things *near* and *far* in the picture.

Design:

Use seed-pods, flowers, etc., in simple borders for book covers. Cut and mount some drawings as indicated above for Thanksgiving card. Make November booklet for Thanksgiving story.

Picture-study:

Boughton. George H. Pilgrims Going to Church.

Bouveret, Dagnan. At the Watering Trough.

DECEMBER

Objective:

Study trees as they look in December: bare trees and evergreens. Study branching and represent *growth*. *Art Text Book III*, pp. 41–45.

Illustrative:

Winter landscape with *tree in foreground* in three values showing sky, land and bare trees. Use crayon, or brush and ink. Daily lessons on blackboard and paper. *Art Text Book III*, pp. 8–9.

Design:

Plan the picture of the landscape to decorate a calendar. Study color harmony in selecting the mount and the hanging cord. Use as motifs the simple spot combinations as suggested by the holly berries and apply to made articles—book-cover, blotter, calendars. Tie with appropriate cord. *Art Text Book III*, pp. 61–62.

JANUARY

Objective:

Draw from flat objects, making special study of *proportions*. Teach studying proportions by pencil measurement. Group two objects, as two apples, two cubes. Study the *fore-shortened* top-face when held slightly below the eye. Study *near* and far positions of two objects. Use paper devices. *Art Text Book III*, pp. 46-47.

Illustrative:

Winter sports. Pose drawing from child in action. Large figures. Blackboard work.

Design:

Line borders. Apply to the rug which is to be woven.

Picture-study:

Bonheur, Rosa. Brittany Sheep.

Millet, Jean Francois. The Shepherdess.

FEBRUARY

Objective:

A group of two objects, as, drum and horn, or apple and tumbler, or onion and cup. Aim for good placing on paper and correct *positions* of objects—*near* and far.

Illustrative:

Stories connected with exercises for special days during the month. Precede lessons with figure-sketches from children in action.

Design:

Valentines. Apply motifs previously developed. Keep them simple. Make book cover for a hero story.

MARCH

Objective:

Bulbs; bare trees, budding branches. Use brush and ink, then repeat in color. *Art Text Book III*, pp. 24, 25.

Illustrative:

March landscape showing cloudy sky. Study pictures representing early spring days.

Pose drawing from children in action and from animals studied. *Art Text Book*, pp. 26, 33.

Design.

Line spacing in making plaids.

Design unit from given number of lines and spots. Arrange to cover a surface, as, for wall paper, the inner lining of a book cover.

APRIL

Objective:

Sprouting bulbs, branches, growing plants, as, geranium, narcissus. Use charcoal, colored crayon, water color. Spring flowers, with foliage, arranging in vertical oblong. Study growth, positions of branches leaves, and color. Express these in *two values.*

Illustrative:

Landscape—spring. Study blossoming trees. Encourage observation of color out of doors. Show the dainty coloring of this season.

Design:

Apply a surface design, using a simple flower unit, for the inner lining of a book cover. Limit to *one hue* in *two values.*

Make a book cover for spring work. *Art Text Book III*, p. 23.

MAY AND JUNE

Color:

Review color lessons given in September. Compare appearance of spring landscape with autumn time.

Objective:

Continue nature drawing. Select very simple sprays, or flowers; spring vegetables and fruits.

Have cuttings and drawings of animals.

Cuttings may be made from blackboard or other pictures.

Drawings should be made from *memory.*

Make an animal book for First Grade children.

Illustrative:

Pose—rapid figure sketches—action poses—sketch from memory. Large figures.

Summer occupations, history, literature, and geography lessons, study landscape pictures. Use as background for the above. *Art Text Book III*, pp. 26, 27, 29, 38, 39.

Design:

Apply flower units; units from given number of lines and spots, etc., to book-covers for June work. Study of space relations; of color-schemes in relation to paper and its purpose. *Art Text Book III*, pp. 66, 67.

Picture-study:

Landseer, Edwin, Dignity and Impudence, or Murillo; The Melon Eaters.

FOURTH GRADE

In the previous grades the children have been satisfied with their efforts, showing but little discontent with crudeness of result. The children of this grade show a marked desire and ability for a more grown-up point of view. The play spirit of the earlier grades is followed by an objective interest in the drawings, and imperfections discourage and disgust them. Emphasis is therefore placed upon technique, since the desire to do well necessitates drill. The work leads to a closer visual analysis and should enable children to gain

skill in accurate seeing and artistic, truthful execution. Much more time is given to the development of one problem though the subject matter does not differ materially from that given in the preceding grades.

Growth, proportion, arrangement, relation of objects, color values, dark and light massing are emphasized. Rhythm and subordination have been presented, and are continued in a more definite way. Simple terms may now be learned in this grade in relation to the study of suggested models. These are worked out as the application demands their use, hence motives for work should be found which seem rational and not imposed for the mere sake of drawing. Book covers for work, gifts for other classes and for members of the family, illustrations for history and geography, notebooks, posters illustrating scenes from literature, landscapes to post in the frame for this special purpose, are suggestive. Toward the end of the year printing is taken up in connection with a class book of work, following a simple device to secure a reasonable result.

The study of landscapes from pictures in text books and collections made by pupils, reviews the relation of sky and ground, placing of objects in background and foreground, and emphasizes the new element—a *road* in the landscape and how to represent it.

The study of figures is taken from the dramatic work, keen interest being aroused by the Greek stories, Viking tales, and history stories.

Objective work centers around a few interesting models. Studies of these are repeated in various mediums; with pencil, in outline, studying growth, shape, relation; with crayon or water color, studying color and bright and dark effects in relation to the other qualities. Color scales are indicated. Special attention is given to mounting upon harmonious backgrounds. Aim to keep the drawings large and train each pupil to record the result of his own seeing.

All small, insignificant work should be avoided. Failure at any point indicates need for drill to improve technique. Avoid the repetition of models used in the previous grades and secure added interest by this element of freshness. Often pupils should be given opportunity to repeat work in undirected seat work of a similar nature. This requires that class criticism not only indicate errors but remedies as well, and thus furnish an incentive for improvement.

In this grade a study of three great masterpieces and the artists producing them is made, and pupils should be urged to make a book containing reproductions of famous works of art. A list of

the pictures and plaster casts in the school with names of the artists may be included.

In connection with the work in design, observation should be directed to its application in our social and industrial life, and a collection of a few samples, such as books, magazine covers, wall paper, dress goods, embodying the units with which they are familiar, will stimulate an interest, and help children to appreciate what is good, and what is beautiful.

Time allotment: Drawing and Industrial Arts will alternate. Period: 30 minutes per day; 150 minutes per week.

SEPTEMBER

Color:

Review standards, tints, shades; and teach intermediate hues, warm and cool colors, non-colors, and brown colors. Use color charts, and make the color scale. Teach contrasted and dominant harmonies, and use when applicable to other work. Indicate the color scale on each nature drawing made during the year.

Objective:

Autumn flower, salvia—in color; in pencil massing.

OCTOBER

Objective:

Single leaves, individual specimens. Select a very simple leaf for study and require six different positions. Block in the shapes with pencil. A small spray of leaves—blocking in simply, showing different positions and aiming for good size, placing and character of growth. Sprays of leaves, grasses, seed-pods, berries or flowers in pencil massing, brush and ink, and color. Study carefully the best arrangement, considering character and growth of the plants. Insist upon large drawings. *Art Text Book IV*, pp. 18–21.

Illustrative:

Study the proportions of any tree that may be seen from the school window and from pictures of trees. Block in with pencil and proportions and general shape of one tree. Aim for good size, placing, and freedom in sketching.

Study different kinds of trees. Sketch another tree, from a picture, or from nature—pencil outline. Emphasize trunk mass and foliage mass. Brush and ink; color. Use in landscape. Keep drawings large. *Art Text Book IV*, pp. 1–6.

Design:

Use one of the above subjects in vertical oblong, working for good spacing. Place on book cover, and tie with a colored cord in harmony with the color scheme.

NOVEMBER

Objective:

Group of two objects—fruits. Block in the appearance studying near and far position. A branch of autumn fruit with foliage—color. Group of two vegetables showing good composition—color; brush and ink.

Illustrative:

Have figure sketches of occupations related to harvesting.

Encourage collections of pictures relating to the season. *Art Text Book IV*, pp. 32–38.

Design:

Use the result of one of the nature lessons and apply as decorative panel on Thanksgiving booklet.

Design a unit,—combination of lines and spots—balanced unit.

Repeat this unit over a surface, or in a border; use as inner lining to book cover, or in border to decorate the cover. Use two tones of the same hue. *Art Text Book IV*, pp. 28, 29.

Picture-study:

Dupre, Julien. Pitching Hay.

Breton. The Gleaners—Haymaker's Rest.

DECEMBER

Objective:

Study evergreen tree, sprays of evergreen and holly or mistletoe. *Art Text Book III*, p. 10.

Design:

Plan for the making of a gift. Study sprays of holly; paint them, reviewing study of leaf sprays in fall. Design simple shapes—leaves and berries for motives and use as decoration for Christmas work.

JANUARY

Objective:

Type solids—cylinder. Study the foreshortened circle. Draw appearance when above and below the eye. Study ellipses—practice before drawing from the object. Blackboard work. A bowl—slightly below the level of the eye; study of ellipse, and balance of sides. Cut and decorate—color; brush and ink. Group two cylinders of same diameters, but different heights, aiming for study of circle at different levels.

Review points made in previous grade; proportion, near and far pictures, etc. Pencil massing, brush and ink. *Art Text Book IV*, pp. 46–50.

Illustrative:

Study pictures of winter landscape. Notice roads and how to represent them.

Encourage collection of pictures showing roads. *Art Text Book IV*, pp. 34–38.

Design:

Apply landscape to book cover, outline the masses with black. *Aat Text Book IV*, p. 9.

Picture-study:

Greuze, Jean Baptiste. Child with Apple.

Mauve, Anton. Sheep Going to Pasture.

FEBRUARY

Objective:

A group of objects based upon cylinders above eye level. Use paper devices to secure good seeing and good composition. Show color values. Draw from a lantern—study ellipses. Represent with colored crayon. *Art Text Book IV*, pp. 6, 51.

Illustrative:

Illustrations of history and literature. Brush and ink; color. Short time sketches of back view poses of children with flags may be tried, proportion being the main point of study. *Art Text Book IV*, p. 33.

Design:

Cut shield, color, use in border. Given lines and spots, originate a surface design and apply. *Art Text Book IV*, pp. 68–69.

March

Objective:

Animals in action from memory, from pictures. Brush and ink, pencil massing. Blackboard work. Carnations, arbutus, catkins, as flower studies. Represent in an artistic manner the color scale on the drawing sheet in small oblongs. Place model high above the level of the eye, and show sideview.

Illustrative:

Landscape composition in four values—including sky, land, bushes, trees; brush and ink. Stress the representation of the road in the landscape. Try to represent the delicate coloring of spring.

Design:

Make designs of squares within squares, teaching balance. Finish these in black and white. Apply to book cover in border decorations. Practise good lettering, on small oblong rectangles. *Art Text Book IV*, pp. 70, 77.

April

Objective:

Spring flowers; use pussy willows, catkins, etc., studying growth and color. *Art Text Book IV*, pp. 78–80.

Show different values in color. A card for Easter may be decorated with spring growth.

Illustrative:

Spring landscape—color.

Design:

Good lettering on small oblong rectangles and applied to the book cover observing space relations. A stencil from a simple flower unit may be applied in an all-over design for lining of portfolio. Make a chart showing related colors in three values. Use letters placed horizontally across the page.

May and June

Color:

Recall observations of autumn landscape and compare with spring and summer landscape. Make a color circle, getting intermediate hues and studying color relations.

Illustrative:

Make a June landscape, using colored crayon.

Plan a decorative treatment of the landscape.

A booklet containing the four landscapes—autumn, winter, spring and summer—may be made from the lessons given during the year, accompanied by an appropriate poem or verse.

Objective:

Repeat October lessons drawing leaves in different positions and drawing from simple sprays. Draw sprays in pencil outline and again with colored crayon. Paint from spring flowers in ink silhouette or draw with colored crayon. Study shapes and growth and values. Show several different positions of the same flower. Sketch spring trees, color, pencil massing. Color scales represented on drawing sheet in appropriate and pleasing manner.

Design:

Continue lettering: Use flower and landscape composition for book cover designs. Continue the use of simple stencils—apply to surface, and border designs of book covers for the work of the year. Cuttings and drawings of birds, or pictures of birds; of pressed flowers accompanied by the drawing may be made into a booklet with an appropriate cover design. *Art Text Book IV*, pp. 81–84, 87–90.

Picture-study:

Reni, Guido. Aurora.

Bonheur, Rosa. Horse Fair.

FINE ARTS

Introduction to Grammar Grades. The following scenes from a play by James Parton Haney, Director of Art in the schools of New York City, should be read by all teachers and thoughtfully pondered. It was written for the magazine "Good Housekeeping;" the parts selected here are used with the permission of the author. As you read ask yourselves the questions: (1) Is our art teaching functioning in the tastes and the homes of the people? (2) Are we setting up artistic ideals in the community?

THE STRANGER

A MODERN MIRACLE PLAY

By James Parton Haney

From the remote time of Euripides to the present of Clyde Fitch and David Belasco the drama has been used for the double purpose of pointing a moral and of telling a tale. Sometimes the moral has been foremost, sometimes the humor, tragedy, or pathos of the tale.

At this moment the taste of the public is much moved towards plays of the mystic order, where the imagery but thinly hides a pointed moral, and where the foibles of our kind are held up to a mirror, reflecting shapes we recognize at sight. Thus the stage has been held for months by modern translations of Everyman, sometimes in search of the Bluebird of Happiness, sometimes beset by Conscience in the guise of the Lodger of the Third Floor Back.

Why not, then, a Masque of Art, a little fable in the form of a drama, wherein shall walk our acquaintances, engaged in what some ribald spirits conceive to be the solemn farce called "Art Teaching," but which others esteem a tragedy, with only occasional touches of humor to relieve its times of tears set all too close together.

With this idea in mind, this little play has been written. It is a mere sketch or skeleton, a drama without a hero or heroine, without a villain, and with no love interest, unless we except the emotion which our mysterious Unknown inspires.

It is called "The Stranger" and its sub-head reads in the formal language of the old dramatic titles:–"A Modern Miracle Play in Four scenes, and an Epilogue wherein it is seen how Everyboy and Everygirl bring a STRANGER to School; and how the STRANGER causes much Mystery and is at last discovered by Them."

The scene is in Everytown, and the time, the Present. Costumes are by the town tailor and milliner and properties by the town's trades-people.

There is no incidental music, save that in the distance, in the second act, can be heard the metallic whine of a gramophone playing "Everybody's Doin' It" and "Billy." Other vulgar airs may be imagined, if these records are not known to the reader.

It is unnecessary to add that as this is a Miracle Play none of it is true; its situations are but the fancies of the playwright.

SCENE III

A street in the main part of Everytown. Different store windows show millinery dresses, furniture, stationery and printing. In the distance a new town library is being erected, with boardings about it covered with glaring advertisements.

EVERYBOY and EVERYGIRL are discovered coming down the street. In the foreground is a STRANGER of tall, slim build. His face is kindly, with deep-set twinkling eyes. About these, many humorous crowsfeet gather apparently planted by endless pleasure in his daily work. His hands are noticeable for their long and slender fingers, and his gestures, though few, are very graceful.

STRANGER—Pray pardon me, but are you residents, here?

EVERYBOY (*pointing down the street*)—Yes, that's our house, the one with the two cupolas and the fancy piazza.

STRANGER—I was anxious to know what is to be the architecture of the new library.

EVERYBOY—You can search me! It'll have columns though. I saw the foundations for 'em.

STRANGER—Ah! I thought perhaps the plans had been printed.

EVERYBOY—Yes, so they were—in the papers, but I didn't notice particularly. The columns are in front and the roof is low. I guess it's what you'd call "Old Style." Anyhow, it's different from Boomer's Business Block that was built last year. The architect for that was one of our town builders and I guess he studied up the latest styles before he built it.

STRANGER—Perhaps he did.

EVERYBOY—I know him, and I'll bet he didn't copy anything. He's a hustler; he'd rather invent new styles than copy old ones.

STRANGER—Yet some old styles were very beautiful. Have you learned in school to know some of the famous buildings from which we've drawn so much I see about me?

EVERYBOY—How do you mean "in school"—in the drawing room with FAITH, our teacher?

STRANGER—Yes, with your teacher, FAITH.

EVERYBOY—No, she doesn't teach anything about buildings.

STRANGER—Perhaps she teaches you about design as it appears in the hats and dresses I see in the windows here.

EVERYGIRL—Oh, you're making fun.

STRANGER—No, I'm serious.

EVERYGIRL—Why, we study design; but our designs are for curtain borders. I've just made a picture after Corot, and my brother is making a design for a candle-sconce, and at home he is making a pillow with a girl's head on it—burning it—you know how.

STRANGER—Yes, I've seen such. But let me ask: Isn't that window there with its dresses only a big design?

EVERYGIRL—What do you mean?

STRANGER—Why, that curtain behind is the background, is it not? And the dresses are the big spots, and that row of hats is a border.

EVERYGIRL—That's funny. I never thought so, but it is a design—only it's not a very good one.

STRANGER—I think you're right, but why isn't it good?

EVERYGIRL—Why, it looks so scattered.

STRANGER—Just so; but how about the dresses themselves—are they designs too?

EVERYGIRL—I can't see how; they have no spots and borders.

STRANGER—Oh, but haven't they? Look at that brown one—hasn't that some big masses?

EVERYGIRL—You mean the yoke and those cuffs?

STRANGER—Exactly.

EVERYGIRL—But how can it be a design with that great line of trimming running cat-a-corner across the front?

EVERYBOY—(*with some heat*) If that's a design it's a mighty bad one.

STRANGER—True again!

EVERYBOY—I see; you mean the dresses are designs, but some are good and some are bad.

STRANGER—Yes, that's just what I had in mind.

EVERYBOY—And do you mean that about the shop windows too—that every one is a design?

STRANGER—Yes, everyone is a design.

EVERYGIRL (*keenly interested*)—And is that true of the hats, too?

STRANGER—Well, what do you say? How about those two in the middle of the next window?

EVERYGIRL—I like the blue one's shape—but that's only a cheap hat. Why, the other has a real willow plume.

STRANGER—Yes, but does the willow plume make it a good design?

EVERYGIRL—Why—Why—(*lost in the struggle between admiration of cost and pattern*)—the most expensive ought to be the best, oughtn't it?

STRANGER—Beauty, unfortunately, is not determined by price.

EVERYGIRL—Well, that willow is a fright, but I never would have dared to say it, because—they're all the style now.

STRANGER—Would you make yourself ugly for fashion's sake?

EVERYGIRL—How funny you are! No, of course not—that is, not real ugly. But one must follow the fashion, musn't one? Why, we're just buying a new wall paper for our parlor—because it's in style, though (doubtfully) it's not the kind of design I think you'd like.

STRANGER—Why not?

EVERYBOY (*breaking in*)—Sis is right; you'd faint at it! It's got roses the size of a plate and tulips bigger; but Ma heard it was the fashion, so she fell for it.

STRANGER—But perhaps the wall paper will make the room a good design.

EVERYBOY—The room! You mean to say you look at a room as a design, like these hats and dresses and shop windows?

STRANGER—Well, you shall say. How about the walls?

EVERYBOY—Why—why—of course the pictures make spots on 'em.

STRANGER—Yes?

EVERYBOY—The big pictures make big spots and the little ones little spots, and the mantelpiece and the windows are the biggest. Why, of course—I see; only I never thought of it that way before.

EVERYGIRL (*who has been absorbed in thought before the window of hats*)—Have you ever been to our school?

STRANGER—No.

EVERYGIRL (*wistfully*)—Couldn't you come and talk to our class—I think Faith would let you—and tell us about design in hats and dresses and things?

EVERYBOY (*eagerly*)—Yes, and about houses and rooms! My father would like us to know about things like that. He's all for use—he's a printer, and I'm going to be one. Doesn't this design business cut any ice in printing?

STRANGER—It certainly does.

EVERYBODY (*with decision*)—Well, come along then. FAITH will let you talk, I know, and you can begin about the house and then go on to the other things.

EVERYGIRL—Oh, the hats first, please.

EVERYBOY (*with authority*)—No, the hats can wait. I see that wall paper going up, and I'm getting dizzy a ready. Come along. (*Exit all.*)

(*Curtain*)

SCENE IV.

The Schoolroom—Faith at her desk.

Enter EVERYBOY *and* EVERYGIRL *dragging* STRANGER *by the hand.*

EVERYBOY (*eagerly*)—Oh, FAITH, here is a gentleman we met on the street who is so interested in design!

EVERYGIRL—And he knows all about hats and dresses and things and he says he'll talk to our class if you'll let him.

EVERYBOY—Yes, but he's to begin with a talk on wall paper and the home, because Sis and I have a hurry up call for that information. Can't he give us a lesson?

FAITH (*demurring*)—Why, this is very sudden. (*Politely to Stranger.*) Of course, we are always glad to receive visitors, but—but (*with an inspiration*)—have you had a Normal Art School training?

STRANGER—No, that I have not had.

FAITH—Then I'm afraid you wouldn't teach according to our methods.

EVERYBOY (*anxiously*)—Oh, FAITH, just let him try. You'll like it. Why he had sister hypnotized in two passes, and he made us see designs everywhere—in the windows, and in dresses and hats. Just let him make a start—you'll like it.

FAITH—Well, the young people seem so eager. I'm not sure that it's right, but I've an hour without a class, so if you really care.

EVERYGIRL—Lovely! I'll get some of the class from the study hall. (*Runs out.*)

STRANGER—So, I'm to begin on the home, am I?

EVERYBOY—Yes, start in on the wall paper.

STRANGER (*to Faith*)—Have you anything here I could use to illustrate home furnishings?

FAITH—Why, yes. (*She rummages in a closet and produces a stencil with one corner torn, and a wood-block showing an archaic flower surrounded by a massive border. She offers these to the* STRANGER.) The stencil I use to explain borders and the wood-block is for all over patterns.

STRANGER (*smiles*)—Thank you; but for my lesson I shall need something more. (*Pulls a pad from his pocket and hastily writes several brief notes.*) (*To Everyboy*) Will you get two or three of your classmates to secure this material quickly;

EVERYBOY—Back in a jiffy—don't start till I come.

STRANGER (*smiling*)—Do not fear. I will not—indeed I cannot.

(*Exit* EVERYBOY, *running.*)

FAITH—Now I must ask your name. The children were so impetuous I didn't get a chance to learn what to call you.

STRANGER—Ah, my name? Different people call me by different names. At present you may call me STRANGER. Perhaps later, when you've known me longer, you'll guess what my real name is.

(*Curtain.*)

(The same scene 15 minutes later.)

FAITH *and the* STRANGER *are discovered. He has just finished clearing the board of its scraps of drawing and writing and is about to take down the Japanese drawings and the pictures "a la Corot."*

Enter EVERYGIRL, *with an eager group of young people, followed by* EVERYBOY *with three of his companions bearing several packages, which they open, disclosing some big catalogues of furniture makers, others of certain manufacturers, a half dozen trade*

magazines on furnishing, some samples of draperies, a roll of wall paper and a score of gray mounting boards. STRANGER *rapidly selects various examples from the books and has the boys and girls cut these out and mount them on the gray cards. These he pins in pairs along the blackboard, each pair showing a good example contrasted with a poor one—chairs, curtains, window draperies, wall papers and the like.*

As the last pair are hung in place, the STRANGER *turns and begins to draw upon the board. The children watch him delightedly as lamps, chandeliers, hangings, and bits of pattern flow from his flying chalk. He turns with a smile.*

STRANGER—Now, we're ready. But you must draw too—this isn't to be a listening lesson, but a "doing " one. First we'll talk about this simple room wall, with its doors, its wainscot, its pictures and its mantelpiece. Let us determine whether this is a design, and if so what is the center of interest in it. (*Everyboy's hand flies up and others follow slowly.*)

At this moment DOUBT *appears and she stands acutely interested as* STRANGER *passes questions about the room and the pupils draw patterns made up of bits of room decoration—a picture between two windows, a group of pictures on a wall panel, a mantelpiece with its ornaments, etc.*

As STRANGER *stops this analysis and turns to talk about the wall paper,* DOUBT *passes over to* FAITH *and whispers.*

DOUBT—Who is teaching?

FAITH—Some one the children brought in to give a lesson on the home. His teaching is different from mine, but the pupils seem to like it.

DOUBT—What is his name?

FAITH—He told me I might call him STRANGER but I suspect that's not his real name.

DOUBT—Where have I seen him before? Ah! Now I remember. It was in a great industrial museum, filled with the work of famous craftsmen. He attracted my attention because as he walked through the many rooms he seemed so happy and so much at home.

(*Curtain.*)

EPILOGUE

Between Scene IV and the Epilogue an interval of six months is supposed to elapse.

In this time the STRANGER has developed his lessons on the home and has gone on to teach similarly in regard to dress, the architecture of the town, its commercial and its civic art.

The pupils have made many notes and scores of sketches. They have recited frequently from their notes and have become familiar with the books which deal in a simple way with the topics referred to. The note books are filled with clippings from many sources, illustrating good and bad examples of design in the subjects studied and they have helped gather illustrative material for the class room lessons. The class room itself has been metamorphosed. The headless Nike is gone. The bulletin board bears three or four well spaced and well arranged notices. A great exhibition panel on one side is covered with mounted cards of dress, furniture and interior decorations and room decorations, and a similar panel on the other side bears a score of designs by the pupils of similar problems solved by themselves. The blackboard is covered with sketches of lamps and lamp posts which have formed illustrations for a lesson on civic art.

The stranger's reputation as a teacher has spread. DOUBT has frequently come in, in company with many of the parents of the pupils. PRACTICAL has become

interested through reading his son's notes on Commercial Art and has induced the STRANGER to give some talks at the Public Library. These have dealt with improvement of the town through attention to the advertisements on the boardings, to the development of a civic center, to the clearing up of the clutter of sheds around the railroad station, and the making of this space a gateway to the town set out with a fountain, trees and flowers. On the strength of these talks a "Committee on Town Betterment" has been organized.

The scene shows the steps of the town library after the STRANGER's last lecture. This has described how EVERYTOWN is to be made a beautiful place of well kept homes, lovely parks and civic buildings designed in a common scheme—partly by the work of the new town committee and partly by the training of EVERYBOY and EVERYGIRL and their mates to an understanding of what makes for beauty in things that touch the home and public life of each citizen.

The STRANGER'S last words of this talk are still ringing in the ears of all: "Be jealous of everything that tends to make life ugly, for ugliness and evil are consorts. You'll seldom find one without the other."

STRANGER—Now, good friends, I must leave you.

DOUBT—You mean you are leaving EVERYTOWN?

STRANGER—Yes.

DOUBT—But you'll return, will you not?

STRANGER—Yes, I'll always be at your call so long as FAITH carries on our lessons and PRACTICAL keeps the new committee pressing forward the good work. (*All crowd around him to say farewell.*)

FAITH—But you haven't told us your real name yet—nor just what is your real business.

STRANGER—Well, I'll tell you my business and then you shall say who I am.

My business is to quicken in people everywhere a sense of what is truly fine—to make them grow in taste through constant choosing between good forms and bad—to make them understand that beauty is not something to be put up by others for them to admire, but something which they should create whenever they dress themselves, deck their rooms, plan their houses, or set forth the windows of their shops.

It is mine to show to PRACTICAL that the laws of beauty affect his prosperity at every turn and that to know them is to have a business asset of immense value. It is mine to show to COMPLACENCY that these same laws apply to her life and that for her to know them is to enable her to add to the home its most seductive charm.

Most of all, it is mine to show FAITH how she may apply this teaching to the class room, making her work touch in vital ways every phase of the life the child sees about him—for know you, FAITH, DOUBT, COMPLACENCY, and PRACTICAL, that it is to EVERYBOY and EVERYGIRL and their children that we must look to see the civic spirit grow and burgeon into finer and finer forms as these citizens grow to be sensitive to everything that touches their town and its civic welfare.

As the STRANGER *speaks,* FAITH'S *eyes have grown clearer and brighter and the color has mounted to her cheeks.* PRACTICAL *is leaning forward smiling and* EVERYBOY'S *and* EVERYGIRL'S *breath is coming in little gasps of excitement. As he concludes,* EVERYBOY *and* EVERYGIRL *speak with one voice.*

EVERYBOY and EVERYGIRL—Why, you must be Art.

ALL (*echo*)—Why, of course you're Art!

STRANGER (*smiling*)—Did I not say that when I was no longer a stranger to you you would know my name without the telling?

PRACTICAL (*with conviction*)—Why, I thought so, long ago, but your lessons were so full of common sense and useful I couldn't believe it was you.

(*Curtain.*)

I. The purpose of art teaching:

The true purpose of art teaching is the education of the whole people for appreciation.

Prof. Arthur Wesley Dow, in his *Theory and Practice of Teaching Art*, says:

A training that calls for a very direct exercise of the critical powers, developing judgment and skill, is a training that will increase the individual's efficiency whatever his calling may be.

The general public has not thought of art education in this way, but has acknowledged the value of "drawing," especially when it can serve some utilitarian purpose.

A better understanding of the true usefulness of art recognizes creative power as a divine gift, the natural endowment of every human soul, showing itself at first in the form that we call *appreciation.*

This appreciation leads a certain number to produce actual works of art, greater or lesser—perhaps a temple, perhaps only a cup—but it leads the majority to desire finer form and more harmony of tone and color in surroundings and in things for daily use. It is the individual's right to have full control of these powers.

Even from the economic side, that education is deficient which leaves one unable to judge of form and color when he is constantly required to use judgment. This lack of appreciation is responsible for an immense waste of labor, skill, and money, in the production of useless and ugly things. Works of fine art stand among the things which the world prizes most highly. A nation's ideals are revealed in its art, and its art has greatest value when it is the expression of the spirit of the whole people.

In a sympathetic public is found the life-giving influence which creates works of fine art, and the measure of their excellence is the measure of the nation's appreciation.

The attainment of such an end as this places public art education above mere training in drawing, painting, or modeling, and above the so-called practical applications. The work must be organized for a steady growth in good judgment as to form, tone and color, through all grades from the kindergarten to the university. The main question at all stages is whether the art work of the school is making this good red blood of appreciation and giving to the individual the greatest possible encouragement to express himself.

II. The art language.

In the space-arts the elements are but three:

Line—the boundary of a space.

Dark-and-light—the mass, or quantity of light.

Color—the quality of light.

These constitute a language for all forms of space-art whether representative or decorative; architectural, sculptural or pictorial. There is no necessity for any twofold division into representation and design. Design is rather the very beginning, the primer of art, and there is one sense in which all good space-art may be called design.

Under the heading of *Line* may be grouped all kinds of line harmony, beauty of contour, proportion of spaces, relations of size—all drawing, whether representative or decorative.

Under *Dark-and-Light*, elementary and advanced tone study, painting; composition of masses in architecture, patterns and pictures.

Under *Color*, the theory of color, relations of hue, dark and light color, and intensity—color harmony.

When there is a natural relation between the art lesson and some other topic the art teacher takes advantage of it. The opportunities are many to ally the art work with history, mathematics, geography, and literature. Obviously there is an intimate connection between the manual arts and the work in design and drawing; but the art course to realize its purpose, must be a unit in its aim, through all grades. It must stand, first and last, for growth in critical judgment and appreciation of harmony."

The progressive training through all grades in a perception of fine relations of space, tone and color, and the skill acquired in execution are assets alike to the one who goes on to the higher grades, and the one who leaves school to enter the ranks of wage earners. *The industries need trained minds more than trained hands.*

III. Genetic psychology of drawing development in the individual: Dr. Geog Kerschensteiner, director of education in the schools of Munich, Bavaria, says:

1. A child draws what he knows, not what he sees, and at first with little reference to proportion or harmony. 94 per cent of all children do this until the seventh year.
2. As a result of observation, the feeling for form, line, shapes, correct position, proportion, and rhythm,—come.
3. Later the silhouette stage develops—two dimensions, no perspective.
4. Last, the perspective stage appears—slight perspective, overlapping, and three dimensions. Few reach this stage of their own initiative, and not many before ten years of age.
5. The conscious stage of perspective (beginning in boys at seven and girls at nine) develops slowly. Even at ten and thirteen, respectively, children barely understand it.
6. To draw well children need:
   - Good observation.
   - Clear memory.
   - Lively imagination.
   - Strong emotional nature.
   - Aesthetic sense.
   - Manual skill.

IV. Conclusions from the study of art in childhood (Kerschensteiner):

1. Method and matter must be judged by their value and the meaning to the child alone. (There should be no uniform or mass teaching, but the method should consider individual differences.)
2. Drawing activities arranged in a hierarchy, are as follows:
   a. Wigwagging of the scribble pencil (purposeless).
   b. The child sees meaning in the scribble.
   c. His *mental* image next directs, guides, and controls the drawing movements.
   d. He recognizes and names the product. (His own idea of the object.)
   e. He draws stories.

f. He copies pictures.

g. He copies objects in nature, and begins to use representation (two dimensions).

h. He foreshortens areas—(angles, receding of lines).

i. He distinguishes between light and shade.

3. Systematic art instruction should be given after ten years of age.

4. Puberty shows signs of pure art development.

5. Artistic drawing is not a language that any large number of adults will ever speak—therefore stress appreciation.

6. Mechanical drawing and graphs in science should be studied by all pupils.

7. Art intensifies life so art products are made and enjoyed. There should be pictures on school walls, the children having a voice in their selection.

8. Pictures should be exchanged from room to room.

9. More time should be given to seeing pictures, less to drawing. A wise teacher will find out how individual children choose pictures. Children should be encouraged to make picture collections or picture books, and they should be circulated as books of fiction and travel are.

10. There should be:

a. Art museums for experts.

b. Art museums for aid of artists themselves.

c. Art museums for the working people.

d. Art museums for children.

e. Art museums, with lantern lectures, special rooms, special days for teachers and children.

11. The art teacher must know:

a. A little of the theories of art.

b. Great men of art.

c. How to make a choice selection of pictures that appeal to her soul.

NOTE: The following course has received valuable contributions, criticism and suggestion from Miss Olivia Keech, supervisor of drawing in the Baltimore City Schools.

General points:

1. The brush and water color is the medium in the first three grades.

2. Crayon is the medium for color in the fourth, fifth, and sixth grades.

3. Water color (flat washes) is the medium of expression for the seventh and eighth grades.

4. There must be practice papers in drawing as in writing, or any other subject that involves technique. The "result papers" grow out of the practice papers.

5. Each lesson period should open with a few minutes' practice in studying directions, covering with pencil, drawing in the air and on paper long lines for freedom of movement.

6. We make a mistake by attempting too much in both drawing and designing in the elementary school.

7. When spray or flower lessons are given the specimens should be put in a position that shows the natural growth, and not pinned on paper. To do this, clay or small-necked bottles should be used to hold the specimens.

FIFTH GRADE

FALL WORK

I. Leaf Study (Out of this should grow the idea of "foreshortening").

Single Leaf study:

Leaves should be held:

Opposite the eye.

Below the eye (Side view only).

Above the eye.

First—Silhouette with brush and ink.

Second—Block in the outline with pencil.

II. Simple sprays of leaves (two or three leaves only).

First—Silhouette.

Second—Outline with pencil.

REFERENCE; Prang, *Art Text Book V*, pp. 20–21.

III. Tree Study:

Block in the outline for proportion and characteristic shapes. (Study: maple, apple and poplar.)

IV. Lettering:

Learn the plan, then practice the letters. (Ref. Prang, *Art Book V*, pp. 69–70.)

Plan a book cover and letter the title. (Use a one-word title only, and make all letters the same height.)

(Lettering should be begun early in the year's work and the effects should be seen in map-work in geography and history, and in the industrial arts work.)

WINTER WORK

I. Study of objects. Foreshortening of the circle.

The chief points for study are good blocking for shape and proportion, and representing thickness of edges.

For illustration use small pans or paper rolled into a hollow cylinder. These should be held:

At the level of the eye.

Below the eye.

Above the eye.

(The teacher should aid the pupils by drawing ellipses on the board as they appear to the eye at different levels, so that the pupils may compare the ellipse on the object as they see it, with the ellipses on the board.)

(Practice ellipses with free arm movement, at the blackboard and on paper.)

II. Study of Objects—For *near* and *far* position.

Use a group of two objects—cylinder and sphere, or two cylinders of different heights, or a tumbler with an apple, or a tumbler with an orange.

III. Design:

Cutting squares for shape and size relation. Designs should be developed in black and white, or in two values.

Apply to mats, rugs, bags, book covers, etc., and also outline on clay for tiles. The principal problems of this grade are designs for the industrial arts project.

SRRING WORK

I. Leaf Sprays. Foreshortening reviewed.

Use green crayon instead of pencil.

II. Flowers:

Paint simple spring flowers (as the tulip and jonquil), in ink silhouette, studying only shapes and growth.

III. Landscape:

Sky and ground; trees in the distance; near and far trees and a road. (All these studies are related to the foreshortening of the circle.)

General:

Take the class for a visit to an Art Gallery—The Peabody, Walters', the Maryland Institute,—the Handicraft Shop, a church or a cathedral—to study pottery, rugs, mosaics, posters. Wherever possible use the stereopticon or radiopticon to show pictures of cathedrals, designs, birds, flowers, etc., to show line harmony and color composition.

SIXTH GRADE

FALL WORK

I. Leaf Study:

The idea of "foreshortening" (begun in the fifth grade) is continued.

Leaves should be held:

Opposite the eye.

Below the eye (forward and backward views).

Above the eye.

First—Silhouette with brush and ink.

Second—Block in the outline with pencil.

Finish the work in *accented* outline. Read Prang, *Art Text Book VI*, p. 22, for character of line.

II. Leaf Sprays:

(More leaves than were used in the fifth grade.)

First—Silhouette with brush and ink.

Second—Block in the outline with pencil.

Third—Finish in three values (lead pencil) following the scale.

III. Tree Study:

Block in the outline for proportion and characteristic shapes. (Study oaks, elms, and evergreens.)

IV. Lettering:

Practise letters and use them in some decorative way, studying good spacing and pleasing proportions.

WINTER WORK

I. Study of objects—thickness of edges.

Review foreshortening and add the problem of thickness. The teacher should make blackboard sketches of a flat edge, a round edge, and a rolled edge; the pupils should find these edges on objects in the room, and should imitate the teacher's sketches.

Sketch from a round-edged bowl and a flat-edged flower pot, with careful study of shapes, proportions, and thickness. Finish in accented outline.

II. Study of objects—for near and far position:

Use a group of two objects; study the contour of sides, thickness of edges, good size and right placing.

III. Design:

Cutting of both square and oblong spaces for size and shape relations.

Change the square design to fit oblong shapes. Apply to box tops, bottoms of work bags, belts, etc., and use appropriate lettering when needed.

SPRING WORK

I. Leaves and sprays (More difficult than those used in the fifth grade.):

II. Flowers:

Draw, using colored crayons, spring growths, such as the pussy willow, catkins, etc., or simple flowers.

III. Landscape:

Same as the fifth grade, but treated differently. The treatment here is crayon, but the color should be grayed by using pencil under it.

General:

Take the class to visit a picture gallery—the Peabody, Walters', the Maryland Institute, the Handicraft Shop, a church, a cathedral,

or a home in your community, to show some phase of art, and of the Greek, Roman, Medieval, English, and Colonial periods. Use the stereopticon, or radiopticon to show pictures illustrative of art in these periods.

SEVENTH GRADE

Fall Work

I. Flower Study:

Foreshortening flowers—Pencil outline treatment. (Black-eyed Susans or any of the simple fall flowers.)

Make value scale of five values with the pencil. (There should be much practice in this.)

Study simple flowers for values (light and shade).

Practice line shading until a good quality of line is secured. Give samples of the proper treatment of lines to the children to copy.

II. Tree study in values (light and dark with line shading).

III. Lettering and design for the Christmas work.

Winter Work

I. Object Study:

Outline one group of two objects for review of near and far position, thickness of edges, and blocking in for shapes.

Practice line shading.

Draw one object showing two values.

Draw a cube. (Outline sketch only.)

II. Design:

Borders for picture frames, book covers, mats, curtains, etc.

Show the relation of the design to the shape of the object on which it is to be applied.

Spring Work

I. Flower Study:

Make outline sketches from spring flowers.

Use these sketches for suggestions of shapes and growth and make a simple flower composition, to be worked out in color-decorative treatments—(shapes outlined and flat washes put on.)

II. Landscape (Water color treatment):

Same as fifth grade, but lakes and roads should present greater difficulties. (Still no houses.)

Decorative treatment—Shapes outlined and flat washes put on. Read Prang, *Art Text Book VII*, pp. 13–16. Read Teachers *Manual* [to *Art Text Book*] pp. 45–50; 263–267.

General:

Take the class to visit a picture gallery.—The Peabody, Walters', the Maryland Institute,—the Handicraft Shop, a church, a cathe-

dral, a home in the community, a furniture store, to show specimens of furniture and textiles in the different periods of the world's history. Use the stereopticon or the radiopticon to show pictures illustrative of furniture and textiles.

EIGHTH GRADE

Fall Work

I. Sketches from sprays and flowers: Work in light and shade.

II. Tree Study:

Work in light and shade, and in color.

III. Lettering and design for the Christmas work.

Winter Work

I. Object study:

Outline a group composed of a cube or a square prism with a cylinder or a cone.

II. Practical line shading.

III. Draw one object—vase form or bowl—and finish in light and shade, studying high light and ground shadow.

IV. Design:

Cutting circles for shape and size relations. Apply to corners and borders on curtains, table covers, magazine covers, etc.

Spring Work

I. Flower study:

Make sketches from spring flowers. Place in as many positions as possible, and study for use in flower composition.

Make a flower composition. Decorative treatment in color.

II. Landscape:

First sketch houses made of blocks and placed in different positions, then introduce one house in a landscape. Decorative treatment in color applied to a poster.

General:

Take a class to visit a picture gallery.—The Peabody, Walters', the Maryland Institute,—the Handicraft Shop, a church, a cathedral, a home in the community, a furniture store, a library to see specimens of furniture, textiles, rare bookbinding, and architecture. Use the stereopticon and radiopticon to show pictures illustrating these useful and artistic articles.

INDUSTRIAL ARTS

Suggestions for the Teaching of Industrial Arts in the Grades. The growth of industry in modern times has been such as to place it at the very front among the interests of communities and nations. And this rapid development of means for cheap manufacture and transportation has resulted in the withdrawal of the industries formerly carried on in the home and the transplanting of them into factories and shops. The child of today is thus deprived, except in a few cases, of the opportunity to observe or to participate in the industrial processes which form the basis of our life and achievement.

Under the industrial conditions of the present day, with the almost human modern machinery and the highly specialized activities in which each worker does but a small part of the work, there is danger of the worker becoming a mere tool and having no real understanding of the great work that is going on around him.

In 1910, of all the people in the United States engaged in gainful occupations, 70.5 per cent were employed in productive industry of some kind. In the manufacturing industries alone in the same year there were employed over 145,000 children under sixteen years of age. Such conditions clearly indicate the need of some form of industrial education for this great mass of children who are forced into the industries without the advantages of even a pre-vocational education.

For many years the schools have tried to meet this need through various forms of manual training, but in this work too much stress was placed on skill and execution and too little on the thought content of the work. During the last five or six years the growing emphasis placed upon the social meaning of education has caused attention to be turned more and more to the subject matter or content side of manual training, and under the new term, *industrial arts*, it has become a study for interpreting the industries, giving a knowledge of materials and processes, and developing a general industrial intelligence.

In the first three grades the work centers mainly around the activities of the home and the community and these activities are imitated in projects made of paper, cardboard, clay and other materials which are easily manipulated. Too much emphasis should not be placed upon accuracy, precision, or technical excellence of a high order in any phase of constructive work in these grades, nor

should the industrial idea be the most dominant; but the chief aim should be the expression of ideas in industrial materials and the growth of interest, intelligence, and judgment in occupational activities going on in the child's immediate environment. In the fourth and fifth grades the industrial motive should receive increasing emphasis and processes employed should be as far as possible typically illustrative of those actually used in the industries.

Because the simplest industrial processes are often the most primitive the approach to them is frequently made through the study of primitive life. When textile processes, for example, are to be studied, the need of clothing may be emphasized, and means suggested for gratifying this need. Projects for carding, spinning, and weaving may be carried out in simple ways and illustrated by reference to actual operations in bygone times, but to rediscover every step in the original development of these arts is to miss the true purpose of industrial education. The industrial aspects of the study, as distinguished from the historical, require that the child should acquire in some way and at some time—presumably in many ways and at widely separated times—a fairly well rounded conception of textile processes and become familiar with the most important types of textile products. It is not enough to acquire a knowledge of the primitive process of spinning and then to pass on to the weaving of a simple rug. Spinning is an important industry in modern life; it means yarns for all manner of fabrics made from a great variety of raw materials; it means thread of all kinds; it means cordage; and yet the processes are simple, and, by actual demonstration, supplemented by illustrations gotten from magazines and papers or by visits to neighboring factories, the children can get an adequate conception of the extent of these industries and of their bearing upon everyday life.

Dean James E. Russell, of Teachers College, Columbia University, says, "Of late, primary teachers have adopted clay as a convenient medium for expressing art forms. The result is thirty plaques, thirty ink wells, or thirty vases—all very pretty, decorated and glazed, when put in a row on exhibition day. So far I have no criticism. My complaint is that they stop right there. The chief processes in the clay industries are very few; hand molding, turning on the potter's wheel, pressing into set forms, and building up in permanent shape, as in cement and concrete construction. Why not, then, pass from hand moulding, which can be approached through primitive types, to the use of the potter's wheel? A single demonstration of this machine, with the use of illustrations which

may be had in abundance, will give the clue to the entire round of the pottery industries. A few samples varying from unglazed earthenware to fine china, will complete the teaching equipment. Next come brick and terra cotta. But who has ever heard of brick-making in school? I should like to hear of it because it is an immense industry, the products of which are visible on every hand—soft brick, hard brick, fire brick, red brick, yellow brick, ornamental brick, terra cotta. Why should not our children know more about these things than we do? I venture to say that ten hours of instruction judiciously spread over two or three years, and properly correlated with nature study and geography, will give to sixth grade children a better appreciation of one of the staple building materials than ninety out of every hundred adults have today. Is it worth the time? If so, the time can be found."

The materials of most significance in the industries are (1) foods, (2) textiles, (3) woods, (4) paper, (5) metals, (6) clays and allied earth products. Upon these materials our course in industrial arts is based.

The facts concerning the production, manufacture, and distribution of the materials constitute the subject matter of the work. This is closely correlated with the history, geography, nature study, art, and arithmetic of the grade and helps to vitalize those subjects as nothing else could. The work is filled with problems upon which to base the most practical kind of arithmetic, the need of patterns and designs furnishes a motive for the art work, while the evolution of an industry is but the history of the race through its successive stages of development.

Projects made of each material are planned not so much to develop technical skill, as to interpret and explain the manufacturing processes. Professor Bonser says: "Degrees of excellence in finished projects are to be measured in terms of the child's own best efforts, without much repetition, rather than in terms of adult excellence."

Every project made should meet the following requirements:

1. It should be suited to the child's stage of development.
2. It should encourage some independence of thought and lead to an understanding of the materials and tools used.
3. It should be made for a definite purpose.
4. It should lead to an interpretation and understanding of some industrial process.
5. It should have a social value.

The aim of the work as a whole is to bring the life in the school into closer touch with the life outside the school; to help the pupils become alert, intelligent and appreciative in any industrial situation in which they may be placed; to develop better judgment in determining the worth of products, better judgment and taste in the selection of clothing and furniture, and more knowledge of the necessary food elements and therefore more care in combining them. The success of the work will depend upon the teacher's understanding of the spirit, the meaning, and the significance of industrial arts.

REFERENCE BOOKS: Katherine Dopp, *The Place of Industries in Elementary Education*, Univ. of Chicago Press; *Industrial Education*, Teachers College Record, Sept., 1911, Bureau of Publications, Teachers College, Columbia University; James E. Russell and Frederick G. Bonser, *Industrial Education*, Teachers College Publication, Bureau of Publication, Teachers College, Columbia University; *Report of Committee on Place of Industries in Public Education*, National Educational Association, July, 1910; Robert Row, *Educational Meaning of Manual Arts and Industries*, Row, Peterson and Co.; James E. Russell, *School and Industrial Life*, Educational Review, Dec., 1909; John Dewey, *Ethical Principles of Education*, University of Chicago Press; John Dewey, *School and Society*, University of Chicago Press; Russell Smith, *Industrial and Commercial Geography*, Holt & Co.; Dryer, *Elementary Economic Geography*, A. B. Co.; For an extended bibliography see "Annotated List of Books Relating to Industrial Arts and Industrial Education" prepared by the School of Industrial Arts, Teachers College, Columbia University, 1911.

FIRST GRADE

The work of the First Grade deals largely with those phases of social and industrial life which contribute to the home and an attempt will be made to so relate industrial arts to the simple study of industrial activity that in the child's mind there shall be little differentiation between discussion and doing. The main object is to establish a point of view or general attitude toward everyday things the children have, rather than to accumulate any amount of knowledge or develop technique. The children are introduced to various industries and materials and they learn a few simple facts, as much as a little child can assimilate, in relation to foods, textiles, woods, paper, metals, clays and allied earth-products, and projects will be presented which the problem sets and the children can accomplish. This outline is closely correlated with the history for this grade.

Aside from the work given to clarify the ideas in relation to industrial activity, opportunity is also provided for constructive work from the standpoint of expression. It is the manipulation of materials in relation to school activities.

Observe the following suggestions in presenting lessons:

a. Distribute and collect material without friction, and waste of time.

b. Discuss the project, and make directions simple, clear, and direct.

c. Use blackboard illustrations freely. Make it a point to have both the illustration and steps in the dictation on the board.

d. Exercise class judgment through judicious criticism.

e. It is better to have some work well done, rather than much attempted.

f. *Get results* in skillful manipulation, in neatness and accuracy, and in the exercise of judgment.

g. Let the children work independently at their seats in making the same or similar articles to test their initiative.

NOTE: Save samples of each project made for exhibit purposes. Do not permit children to take home unfinished work.

Time allotment: Drawing and Industrial Arts may alternate. 20 to 30 minute periods or 150 minutes per week.

Materials:

Clay, paper, textiles.

Projects Related to History:

Home:

1. Paper: cutting, folding, pasting: paper dolls, shawl for doll, rugs, curtains, furniture, table cloth, napkins, barn, house, bridge, for sandtable work.
2. Clay; toy dishes, playthings, as marbles, tops, beads, animals.

Food:

1. Drying some fruit.
2. Clay: modelling fruits and vegetables, grocer's display.
3. Paper: cutting, folding, drawing—fruits, vegetables, activities in relation to growth, preparation for market, cooking, seedcase for seeds, basket, cupboard for Thanksgiving cakes.

Clothing:

1. Dressing doll.
2. Paper: dolls, patterns, dresses.
3. Cotton, wool and silk. Chart to be used in sense games of touch.

Sandtable Projects:

1. A child's home in the community.
2. A vacation experience in the mountains or at the seashore.
3. The stores.
4. A farm.

School Needs:

1. Clay: modelling objects to illustrate literature, history, or nature, or number.

   Making a useful article, as a flower pot for the baby seed.

2. Paper: freehand cutting, folding, mounting, illustrating, literature, history, nature, or number.

   Making simple booklets—for records of phonic families, word lists, simple stories.

   Making Christmas gift for mother, father; ornaments for Christmas tree.

3. Weaving: Simple book-mark; mat for cornucopia; sachet; rug for floor.

REFERENCES: Seegmiller, *Primary Handwork;* Holton and Rollins, *Primary Handwork;* Prang, *Text Book in Art, Bk. I, II, III;* Dobbs, *Primary Handwork;* Russell and Bonser, *Industrial Education.*

SECOND GRADE

The work of the first grade is prescribed within a comparatively small, undifferentiated circle. The work of the second grade enlarges this circle of vision, and is still closely related to the lives and experiences of children, but with the introduction of some aspects of primitive life, there is an opportunity to define a little more clearly the study of industrial activity. The children are very much interested in the purely informational side when it is presented clearly and simply. Pictures are used, excursions are taken, informal discussions are held. But the children's chief interest centers in doing and making, and in the object made as an end in itself. The facts pertaining to foods, textiles, woods, paper, metals, clays and allied earth products will be presented very largely through a series of projects which help to clarify ideas and strengthen the general attitude.

As in the first grade the handwork will present two phases, viz.: (1) constructive activity in relation to the industrial problem; and (2) materials used for purposes of expression in answer to school needs.

Some of the projects are a means to a better understanding of present industrial problems, others to aid in appreciating the problems of primitive peoples and indirectly a clearer conception of our own. The problem arises in the discussion and the project is the result.

In relation to the problem of school needs: Each lesson should be given as a result of a felt need, viz.: to serve some immediate use in school or home, which the children recognize as valid. Cuttings and foldings can be used in posters or to illustrate stories, or to make an illustrated booklet for individual or class purposes.

Constructive work with materials affords opportunity for growth in skill, in neatness and accuracy, in the development of good taste. Each problem should be carefully considered by the teacher in order to secure results:

1. Materials needed.
2. Plan of procedure; worked out by the teacher to test order of difficulty.
3. Models of illustration.

Observe the following suggestions in presenting lessons:

a. Distribution and collection of materials without friction, and waste of time.

b. Discussion of the project, and the dictation, directions for the process for making should be simple, clear, and direct.

c. Use blackboard illustrations freely. Make it a point to have both the illustration and the steps in the dictation on the board.

d. Exercise class judgment through judicious criticism.

e. It is better to have some work well done, rather than much attempted without thoughtful consideration on the part of both teacher and children.

f. *Get results* in skillful manipulation, in neatness and accuracy, and in the exercise of judgment.

g. Let the children work independently at the seat in repeating the dictation, or in original work.

Time allotment: Drawing and Industrial Arts will alternate. 30 minutes per day, or 150 per week.

Materials:

Clay, textiles, paper.

Projects:

A. Food:

1. Preservation of food; by drying; by salting; by use of sugar; by use of vinegar; by keeping cold; the refrigerator.
2. Baking or roasting food in the hot ashes.
3. Boiling food in hot water heated with stones.
4. Simple baskets for carrying food used by primitive people.
5. Modeling; fruits and vegetables.

B. Shelter:

1. House of cardboard—collapsible—or a wooden cracker box used for the purpose. Each child taking part in producing a house or room for each row or group. These houses may be used for a private dwelling, as a dollhouse with different rooms to be furnished, or a series of stores to be fitted up when discussing stores and market in relation to food supply.
2. Paper for walls, rugs for floors, curtains for windows. Paper, possibly for dishes; textiles used for rugs and curtains.
3. Furniture—paper, possibly wood; textiles for bed and table linen; clay for bathroom fixtures.
4. Housewifery: Care of "playhouse." Talks about sweeping and dusting, air, sunlight. Care of schoolroom, dusting, keeping desk in order.

C. Stores:

1. Store fittings—from children's homes, used as a stimulus in number lessons, and language lessons.
2. Fittings made by children; clay-modeling articles, paper counters, boxes.
3. Playing store; duties of storekeeper, relation to customers, interdependence.

D. Clothing:

1. Collections of cotton, silk, wool. Mount on cards or charts to be used in sense games.
2. Spool knitting. Cord, jute, or yarn. Horse reins.
3. Dressing a skin of some small animal—rabbit or squirrel.
4. Primitive tools used in dressing skins.
5. Primitive means used for hunt—bow and arrow.

E. Sandtable Projects:

1. The farm in autumn; in spring.
2. The fire department.
3. The water supply.
4. Transportation in Baltimore and vicinity.
5. The Cave-men.
6. Indian life among the forest Indians; the Pueblos.

F. Projects Related to School Needs:

Cuttings to illustrate history, literature, or nature, throughout the year.

October.	Book cover for spelling book.
	Fold seed box for nuts and seeds.
November.	Booklet for Thanksgiving story.
	Fold house, barn, church.
	Model fruit, dishes, squirrel, nuts.
December.	Christmas gift for mother, father, for some one less comfortable than ourselves.
	Book cover for Christmas work.
January.	Model toys, Eskimo homes, dogs, for sandtable.
	Fold—clock, sled.
	Booklet for spelling.
	Weave a muff for the Christmas doll.
February.	Fold Valentine, mail bag, postman's cap.
	Model mailcar.
March.	Fold Indian wigwam, cradle, blankets, canoe.
	Booklet for spring flowers.
	Model Indian bowls.
April.	Fold fireman's cap, hose, wagon.
	Book cover for spelling booklet.
	Model the rabbit.
May.	Fold park bench, swing.
	Book for bird notes.
June.	Fold drinking cup.
	Model street car, automobile.

REFERENCES; Dobbs, *Primary Handwork;* Seegmiller, *Primary Handwork;* Holton & Rollins, *Primary Handwork;* Prang, *Text Books in Art, I, II, III.* Russell and Bonser, *Industrial Education.*

THIRD GRADE

The work of the second grade aims to establish a point of view, and thereby create an interest in an appreciation of industrial activities, and upon this foundation the children of the third grade are led to recognize and to think of the things which serve their needs—food, clothing, shelter, as the products of industry, together with the materials, and the workers who produce them. The necessities of life are supplied by transmuting or changing raw materials, clay, textiles, paper, wood, food, into manufactured products, so the work involves a study of these industries.

The study of an industry requires that some informational material shall be given through discussion, pictures, excursions, and

by doing some kind of constructive work. Sometimes the whole or a part of a period may be devoted to discussion, but the child's chief interest lies in manipulation. Industrial arts ties up closely with geography and history and often the information is presented under these heads, but time is also taken for the manipulation of materials. Often part of the work is accomplished at home or in moments of leisure at school. It is not the purpose of the work used in illustration of the subject to emphasize the training of the hand though some skill in manipulation should be attained. Careless work is not to be tolerated and a standard for third grade is the degree of perfection which is possible to secure through unaided effort. A genuine desire for good work is stimulated through an interest in the project which develops a desire to do one's best in order that the finished product may bring satisfaction.

The work is kept on the level of the child's constructive ability in order that he may do things by *himself*, thereby developing independence and initiative. In many instances neither patterns nor definite directions are given, simply the broad outline which the children are to fill in according to their own interpretation.

Another phase of constructive work affords some opportunity for growth in skill, in neatness and accuracy and the development of good taste. These are projects in relation to school needs. Most of this work will be the outgrowth of discussion and dictation by the teacher. Both teacher and children should choose materials with care. A definite plan of procedure worked out by the teacher to test order of difficulty, and models for illustration should be freely used as incentives to good work. Observe the following suggestions in presenting lessons.

a. Distribute and collect material without friction and waste of time.

b. Discuss the project, and give clear and direct dictation to aid in the process of making.

c. Use blackboard illustrations freely. Make it a point to have both the illustration and steps in the dictation on the board.

d. Exercise class judgment through judicious criticism.

NOTE: Save samples of projects made, for exhibit purposes. Children need to see work of classmates.

The outline which follows covers both phases of the work. Cuttings, drawings, foldings, modelings, and any other free manipulative work done as seatwork should be effectively used in the production of posters, sandtable scenes and house problems similar to those of the second grade. A series of posters illustrating the

field of industry, is rich in suggestiveness as a frieze above a blackboard. Unify the results of manipulation in some well-defined way.

Time allotment: Two half hour periods per week, or eighty hours per year. *Time Distribution:* 30 lesson periods for discussion; 45 lesson periods for manipulative work; 5 lessons for excursions. The figures below indicate the number of lessons on each subject.

Subject	*Topic for Discussion*	*Manipulative Work*	*Excursion*
Paper:	(1) Early Records.	(20) School Needs.	
Clay:	(2) Discoveries of the Indian women.	(2) Model a vegetable Model a fruit.	
Pottery:	(2) How White Cloud's Mother Made a Bowl.	(2) Model a bowl.	Visit a pottery.
	How a Flower Pot is Made.	(2) Model a flowerpot. (1) Model a plate.	
Textiles	(15)	(2) Model a tile.	
Skins:	How Cave-men Prepared Skins. How Docas got a new Shirt.	(1) Make spectacle cleaners.	
	How Leather is Made. How Bark is made into Cloth.		Visit a shoemaker's shop.
Needles:	Burr's Needles and Thread. How Thread is Made.	(1) Crocheting a string for mittens.	
Weaving:	Materials for Baskets.	(2) Raphia doll hat.	Gathering basket materials.
	How an Indian Basket Tells a Story.	(3) Corn husk basket. (1) Sewing on buttons.	
	Weavers among the Shepherds.	(3) Weaving a doll's hood.	
	Story of a Rug.	(3) Small jute rug.	
Food:	(9)		
Milk:	At the Dairy. Flocks and Herds among the Shepherds Making Butter.	(2) Making the charts.	Visit a dairy.
Corn:	Raising of Indian Corn. The Story of Mondamin. How Cornmeal and Hominy were made in Pioneer Times.	(1) Making butter.	

Subject	*Topic for Discussion*	*Manipulative Work*	*Excursion*
	A Meal with Gemila.		
	Cold Storage.		Visit a house in process of erection.
Wood:	(2) Houses at Home and Abroad.		

INDUSTRIES—CLAY, TEXTILES, PAPER, WOOD, FOOD.

I. Clay:

In the previous grades the children have learned the sources, kinds, uses, characteristics.

1. Discovery of the use of clay by Indian women.
2. In this grade—in geography—the study of soil; its formation, rocks which form clay-feldspar. Differences between clay and the other soils.
3. Nature-study experiments with different soils.
4. Stories about the discovery of the use of clay; "Grandmother Kaolin" story.

Organize the data in relation to a real problem—*Pottery:* the earliest potters, the Indians; a modern pottery:

1. Primitive: origin, preparation, methods of making, decoration of an Indian bowl.
2. Modern: steps observed in the making of a flower pot.

Projects:

1. Flower pots, small vases, cups, small plates; decoration with water color or rhythmic repetitions of seed units which leave incisions. Manipulate the clay in mass in making flower pot and fruits. Roll the clay for plates.
2. Model: fruits, vegetables; Dutch tiles, when studying Child Life in Holland.
3. Visit a pottery.

II. Textiles:

In the previous grade the children have learned to recognize the cotton, wool, silk, by sight and by touch, noting chief characteristics and uses. The use of skins by primitive peoples has been emphasized. In this grade: Review facts previously given, present new facts.

Primitive cloth; skin, bark:

1. Skins:
   a. How Cave-men prepared skins.
   b. How Indians made leather from skins.
   c. Decoration.
2. Leather:
   a. How leather is made today.
   b. Compare primitive and modern methods.
3. Bark:
   a. How bark is made into cloth.
   b. Printing designs by means of wooden mallets.

Projects:

1. Using chamois skin, parts of old kid gloves in making spectacle cleaners, penwipers.
2. Visit a shoemaking shop.
3. Dress a rabbit skin.
4. Simple block printing on paper and cloth using a potato or block of wood as a tool for the purpose, or by using a paper stencil. Make inner facing or lining for book cover.

III. Needles: primitive and modern:

1. Review facts gained in study of Eskimo, Cave Boy, Indian.
2. Story of primitive thread
   How Burr made thread.
3. Kinds of needles and thread:

Uses in the home, by hand, and machine; factory machines.

Projects:

1. Collections of kinds of threads from leather, thongs, rope, twine, cord, to the finest thread made at the present time.

2. Use needles and thread—crocheting or braiding or knotting a string for a pair of mittens; braiding a narrow band for a doll's hat; braiding raphia strands to sew into a basket; sewing on buttons.

IV. Woven Goods:

1. History of weaving in primitive times: Cave-men, Indians, shepherds.
2. Sources of materials, history of the primitive loom; uses of products.

Projects:

1. Simple baskets in imitation of Indian work made of grasses, corn husks, or other nature materials; simple basket of raphia; weaving a doll's tam o' Shanter, coat or skirt; small rug of jute, or a community rug on a large loom.

2. Chart of nature materials suitable for weaving, with pictures of weaving done among primitive peoples.

3. Encourage the making of dye-stuffs from berries, walnut hulls, onion skins, and grasses.

4. Make chart of wool fibers showing the different steps in preparing for weaving, including the dyeing.

5. Simple designs for woolen plaids.

REFERENCES: Dropp, *Tree Dwellers and Cavemen:* Chase and Clow, *Stories of Industry*, Vol. I, II; Chamberlain, *How We are Clothed;* Mason, *Woman's Share in Primitive Culture;* McIntyre, *The Cave Boy*; Snedden, *Docas.*

V. Food:

In the previous grades the children have learned the names of foods found in market and in common use in the home. Recall these and classify as fruit, vegetables, meat, and milk products and cereals. Closely relate the study of milk to the study of the Dairy and the Pastoral People in Geography:

Milk.

1. Value as a food: what it contains; sugar, oil or fat, water.
2. Cleanliness of dairy, and care of milk; cooling, covered cans and bottles.
3. Products; cream, butter, cheese, buttermilk.
4. Making butter, cottage cheese; koumis among the shepherds.

Corn: a cereal.

1. Indian food:
   a. Briefly review the following historical facts learned in second grade: Agriculture among the Indians; gardens of Indian women; uses of corn; preservation, storage, transportation in baskets; uses in religious ceremony. Tell story of "Mondamin" from Hiawatha.
2. Food used.
   a. Food used by pioneers of North America; corn, hominy.
   b. How cornmeal and hominy were made in early days.
3. Food products in regions inhabited by pastoral peoples.
   a. Dates, figs, cocoanuts, coffee.
   b. How prepared and served.

4. Storage and marketing of fruits and vegetables at the present time.

Projects.

1. Preservation by drying—dried pumpkin, apples, corn.
2. Preparation for use: cornmeal, with mortar and pestle; hominy, by crushing.
3. Parched corn; popping corn. Making popcorn balls for a school sale.
4. Collection of corn products.
5. Making butter; cottage cheese.

REFERENCES: Andrews, *Seven Little Sisters, "Gemila"*; Chamberlain, *How We Are Fed;* Bass, *Pioneer Life.*

VI. Wood.

In the previous grades the children have become familiar with the kinds of homes, at home and among primitive peoples.

1. List the names of shelters or homes found in different climates; note predominating use of wood.
2. Visit a house in process of erection and learn the uses to which lumber is put.
3. Begin with the school and make a list of the kinds of woods used in the house.
4. Make a list of the parts of a house and indicate the kind of wood used in each. Let children report the kind used in their house.
5. Preservation of wood: painting to prevent weathering and rotting; effect of vine growths, as ivy; use of water spouts.

Projects.

1. Collection of pictures of homes in all climates. Collection of pictures showing uses of wood in buildings: as, houses, barns, garage, dog kennel, bird house; in parts of a house, as frame work, sliding, lath, shingles, windows and doors.
2. Use a cigar box with glass at sides as a home for germinating seeds.

REFERENCES: Andrews, *Seven Little Sisters. "Jeannette, the Mountain Maiden"*; Chamberlain, *How We Are Sheltered.*

Paper:

Use in response to school needs.

Records. Review history of Indian picture writing; records on notched sticks; traditions and story-telling among the pastoral tribes.

Projects.

1. Booklets for records of work in spelling, history, literature, arithmetic.
2. Thanksgiving place cards for Thanksgiving dinner.
3. Christmas gifts, Valentines, Easter cards and invitations, including envelopes.
4. Envelopes for work, book marks, for school and home use.
5. Manipulative work; cuttings, foldings, drawings, used in posters; in sand-table scenes.

REFERENCES: Bonser and Russell, *Industrial Education;* Dobbs, *Primary Handwork;* Seegmiller, *Primary Handwork.*

FOURTH GRADE

The knowledge and appreciation gained by the children in the third year, of the workers of the world, their products and the materials with which they work, is used as a foundation for enlarging ideals of service and interdependence in this grade. The same underlying principles guide in the selection of data for study; the fundamental needs of man—food, clothing, shelter, communication

and transportation—and the same need for dynamic effort is present since information is clarified by demonstration. The study of a chosen industry requires that informational material shall be given through some problem set which leads to observation, discussion and experiment. Pictures, excursions or visits to the place of industry, talks with the industrial worker, collection of materials, and sometimes products are invaluable aids to clarify ideas. The study of an industry calls for some constructive work, for since children's chief interest centers in doing things and in the object as the result of effort, their appreciation of industrial activity goes hand in hand with knowledge if they are permitted to share experience with the real worker. Sometimes the whole recitation period is devoted to discussion of the industry, sometimes only a part of the period, the rest of the time being given to manipulative work. The constructive work is therefore used to illustrate some phase of industrial activity or to supply school needs. Projects are related to some definite industrial problem or some specific school need which the children clearly understand. Often a subject in industrial arts is so closely tied with history or geography or nature study that the informational facts will be presented under these heads, and it will be necessary only to briefly review them in the industrial art period to place them in their proper relation to the proposed constructive work.

Constructive work through materials affords opportunity for growth in skill, in neatness and accuracy, in the development of good taste. Both teacher and children should choose materials wisely. A definite plan of procedure should be worked out by the teacher to test order of difficulty. Models for illustration also serve as incentives to good work.

Observe the following suggestions in presentation of lessons:

a. Distribute and collect materials without friction and waste of time.

b. Discuss the project, and give clear, and direct dictation to aid in the process of making.

c. Use blackboard illustrations freely. Make it a point to have both the illustrations and steps in the dication on the board.

d. Exercise class judgment through judicious criticism.

Time allotment: Two half hour periods per week or eighty hours per year. If necessary, a drawing period may occasionally be taken for manipulative work. Some of the work will simply be demonstrated before the class, while collections and mounting are usually made outside of school hours. *Time distribution:* 35 lesson periods

for discussion; 40 lesson periods for manipulative work; 5 lesson periods for excursions. The figures below indicate the number of lessons in each subject.

Subject	*Discussion*	*Manipulative Work.*	*Excursion.*
How we make Records			
Paper:	(2) The story of the first paper-makers. Paper and its uses.	(25) School projects.	
How we are sheltered:			
Clay:	(3) Clay as a building material. Some experiments with stone.	(1) Making bricks. (1) Building a wall.	Visit the Court House in city to view marble interiors and monuments.
Wood:	(4) Kinds of wood. Uses Tree products Our visit to the lumber yard.	(1) Labeling and mounting hard and soft woods. (3) Making wooden toys with prepared wood.	Visit the lumber yard or sash and blind factory.
How we are clothed:			
Furs:	(3) Furs and their care. The hunter and trapper.	(1) Mounting pictures and their products.	
Wool:	(6) Animal fibres and their preparation. Ranch life in the West. A Navajo blanket.	(3) Weaving a community rug.	
Cotton:	(5) Cotton and woolen clothing. Cotton fibres and their preparation. Our visit to a bag factory, or cotton duck mills. Uses of cotton cloth.	(3) Weaving. a wash cloth.	Visit a cotton mill, or bag factory.

Subject	*Discussion*	*Manipulative Work*	*Excursion*
How we are fed:			
Foods:			
Starch:	Foods containing starch. Plants containing starch. How flour is made. Our visit to the flour mill.	(1) Tests for starch. (2) Mounting a grain chart.	Visit a flour mill.
Sea food:	(4) Oystering.		
Tree products:	(3) Cocoa. Spices.	(3) Preparing spices for First Grade to use in sense games. Mount in ounce bottles and label.	

INDUSTRIES—CLAY, WOOD, TEXTILES, FOOD, PAPER

I. How We are Sheltered:

Clay.

In the previous grade the children have learned sources, kinds, characteristics, and uses of clay; and its relation to other soils, through experiments, and have manipulated it to certain uses. Review facts given.

Clay as a building material:

1. List the kinds and uses made of bricks in the vicinity: houses, walls, foundations, walks.

2. Experiences in finding and identifying clay—both wet and dry. Make bricks of clay found in vicinity of the school, observing the ratio of dimensions, if the usual size cannot be made.

3. Brickmaking: materials used; clay-pit; machinery used; kiln, transportation. Location of local centers of industry.

How bricks are placed in a wall, mortar, and tools used.

4. Stones used for building. Name kinds used in vicinity. Determine qualities by observation and experiment.

Projects.

1. Find clay in vicinity and prepare it for use. Make a miniature brick for specific use in a community effort, as the Trojan wall or house.

2. Collect samples of building stones. Label and group according to similar characteristics.

3. Collect pictures in which uses of stones are illustrated, as in monuments, public buildings, walls, etc.

Wood.

1. Recall the kinds of wood used in the school building and in the house in process of erection observed in the third grade.

List the kinds, classifying them as hard, and soft woods.

2. Extend observation to uses of wood in furnishings; in construction, as in boats and cars, railroad ties, posts; in shipment, as boxes. List uses and kinds of wood used in each. Observe to determine reasons for choice of wood used. Discuss methods of preservation.

3. Main processes in lumbering: felling, sawing into planks, boards, lumber-yard.

4. Tree products: bark, leaves, root, sap. List the trees yielding the product and the manufactured article made from the product.

REFERENCES: Chamberlain, *How Are Sheltered*, pp. 89–109; Chase and Clow, *Stories of Industry*, Vol. I, pp. 121–125.

Projects.

1. Collection of hard woods, soft woods.
2. Collection of tree products.
3. Collection of pictures of trees, products and their uses.
4. Community work:

a. A crude house of logs with mortar or clay between; branches cut in uniform length by some member of the class.

b. Furnishing a house made of four soap boxes as a gift to the first grade.

c. Marble boards from parts of soap boxes.

d. Ring toss from soap box and 1-2" dowel.

e. Toys of coarse wood for younger children, as horse, jumping jack, wagon, wood prepared by manual training department.

Related subjects.

Arithmetic problems.

Geography: Location of lumber areas in the United States, and markets.

Language: Life history of a tree.

II. How We are Clothed:

Textiles.

Furs:

1. As a protection from cold. Articles made of fur. Kinds observed and how to distinguish them. How to take care of furs.

2. Visit a furrier in Baltimore to learn the best method of caring for furs during the summer, where furs come from and some idea of the value of the skins and the manufactured garments.

3. The story of the life of the hunter and the trapper.

Related subjects.

History: The Indian Fur Trade.

Geography: The regions in which furbearing animals are found.

Arithmetic: Furs and winter wraps.

Projects.

1. Collection of pictures of furbearing animals.
2. Collection of pictures of articles made from fur.
3. Samples of fur mounted and labeled.

REFERENCES: Chamberlain, *How We Are Clothed;* Chase and Clow, *Stories of Industry*, Vol. II. U. S. Department of Agriculture. Farmers Bulletin, No. 328 (Pratt Library). Washington Irving, "*Astoria*," H. 7912; Robinson, *The Great Fur Land*, H. 1063.

Animal fibers. Wool.

The child's own clothing will furnish the point of attack, and each one may bring samples of materials used for clothing at the different seasons. Classify them. Discuss their suitability for different climates and seasons of the year. Why woolen clothes are worn in winter.

1. Sources of wool—sheep and other wool-bearing animals.

2. Simple presentation of processes of preparation of the fibre, shearing, washing, carding, spinning, reviewing work of previous grade.

Related subjects.

Geography: Sheepraising in the United States; Location of woolen mills.

Literature: Jason and the Golden Fleece.

Arithmetic: Winter Clothing; House furnishings.

Language: John's New Coat. Our Test for Wool.

Vegetable fibers. Cotton.

1. Prevalent use of cotton. Compare with wool. List its various uses.
2. Preparation for use. Invention of the cotton-gin. Whitney, the inventor.
3. Our Cotton Duck Mills.

Related subjects:

Geography: Conditions of growth.

Arithmetic: Summer clothing. Laundry bills.

Language: The Story of a Cotton Gown.

REFERENCES: Chamberlain, *How We Are Clothed*, pp. 39–56–79; Chase and Clow, *Stories of Industry*, Vol. II; Carpenter, *Geographical Reader, North America*, pp. 109–119; Montgomery, *Beginner's American History*, Chap. 19, pp. 200–202; Harris, *Uncle Remus Stories;* The Story of Cotton, *School Classics Series.*

Projects:

1. Chart of different cloths manufactured from wool.
2. Chart of different cloths manufactured from cotton.
3. Collection of pictures illustrating wool industry, cotton industry.
4. Testing wool and cotton. Burn a cotton string; a woolen string; note difference.
5. Weave a community rug with a design or pattern.
6. Weave a sofa pillow, jute, felt, or silk, or wool, or cotton.
7. Weave a cotton wash cloth. Use common cord, wrapping or cotton floss.
8. Study designs found in cotton cloth. Make a collection of six samples. Judge, to find the best. Make a pattern for a weaver.
9. Use stencil or block, printing in making an inner lining for portfolio. (See Third Grade.)

III. How We are Fed:

Foods: Introduce by naming the foods served at the different meals.

1. Recall lists made in third grade of fruits, vegetables, meat and milk products and cereals.

In meat we find protein; in some vegetables and cereals, starch and water; in green vegetables, minerals, cellulose and water; in fruits, acid and sugar.

List the foods in the above classes.

2. Classify foods containing starch.
3. List plants in which starch predominates, as grains, seeds, leaves, roots.

Value of food storage. Use made of starch foods.

Cerals:

1. Kinds.
2. Breakfast foods.
3. How flour is made.
4. Value of whole wheat bread.

Related subjects:

Geography: Wheat raising.

Arithmetic: Problems on wheat, on flour, on foods.

Language: The Story of a Grain of Wheat. The Uses of Starch.

REFERENCES: Chamberlain, *How We Are Fed;* Chase and Clow, *Stories of Industry; The Story of Wheat*, School Classics Series.

Sea-food:

1. List of sea-foods which our own bay contributes.
2. Oyster culture:

a. The oyster; natural beds; artificial beds; conditions governing the location of those beds.

b. Oyster gathering—tonging, dredging.

c. Life of the oysterman; the oyster navy.

d. An oyster town; location, wharves, buildings; shipping.

e. Use of shells; value of an oyster industry to Baltimore.

Related subjects:

Arithmetic problems.

Language: Life of an Oysterman. An Oyster and its Enemies.

REFERENCES: *Atlantic Educational Journal*, Sept. 1908, *Oyster Industry*, Rosalie Ogle; Carpenter, *Geographical Reader*, p. 45; Chamberlain, *How We Are Fed*, p. 64.

Cocoa and chocolate:

1. Cocoa and chocolate as a beverage; in ice creams and in candy.
2. Source, manufacture.
3. Food value and preparation for table use.

Spices:

1. Kinds, uses, sources, preparation for the market.
2. Rarity in ancient times as compared with today.

Related subjects:

Arithmetic: Ice Cream Stands, Grocery bills.

Geography: Location of regions from which spices come. Routes of shipment, etc.

Projects:

1. Collection of spices in bottles which may be loaned to first and second grades for sense games.
2. Collections showing the steps involved from a grain of wheat to a loaf of bread.
3. Tests for starch:

a. Scrape potato and put in water. Rinse a piece of cloth in the water and dry. Note stiffness.

b. Use iodine. Place any article of food upon it. Note discoloration, if starch is present.

4. Make paste from flour and use in mounting.
5. Starch party: Children bring food containing starch.
6. Cocoa. Place a bit in a cup. Pour boiling water and serve at the party.

IV. How we make records:

Paper:

Use in response to school needs.

History: Review the points given the previous year. Wasps the first paper-makers; list kinds of papers; uses, values, materials from which paper is made.

Projects:

1. Booklets for record of work: Composition, History, Geography, Literature, Arithmetic, Nature-Study.
2. Envelope for daily samples.
3. Portfolio for special work.
4. Book-marks for home and school use.

5. Holiday gifts. Thanksgiving place-cards for Thanksgiving Dinner; Christmas gifts; Valentines. Easter cards.

6. Magazine covers.

7. Special Day programs.

Related subjects:

Arithmetic. Concrete work in linear and square measure.

Nature-Study: insects.

REFERENCES: *Art Text Book*, III, IV; Bonser and Russell, *Industrial Education;* Dobbs, *Primary Handwork;* Seegmiller, *Primary Handwork; School Arts*, Magazine;

NOTE—Save samples of each project made for exhibit purposes. Children need to see work of classmates.

FIFTH GRADE*

Read carefully the Suggestions for Teaching Industrial Arts, pp. 639–642, as the principles underlying the work are given here. Keep constantly in mind the meaning of the term *industrial arts—an interpretation of the processes by which raw materials are transformed into products of greater use and higher value.*

Use the graphs on the pages following, which give statistics of Maryland's manufactures, and of Maryland's workers (both men and women) engaged in the various industrial occupations.

I. Paper—"How the race provides itself with records."

1. Introduction:—Let the pupils discover, by adroit questioning, the materials in the room that have the most important effect upon their school life. Paper, books, printing—ought to stand out as absolutely necessary in their work. From this lead back into the home to find out the importance of paper there; then out into the community.

The topic might also be introduced through *The Story of the Alphabet* by Clodd.

2. Projects:

a. Spool-basket, desk-pad, portfolio, cards for filing case. (Select two)

b. Book (required).

c. Collection of samples of paper with their names and values (required).

d. Make paper from linen rags.

3. Subject Matter:

a. The invention and manufacture of paper according to the summary taken from Butler—*The Story of Paper Making.* (See article at the end of this subject, p. 665.)

b. The evolution of book-making from the Greek and Roman tablets to the modern book.

c. Different materials used for binding books—paper, cloth, leather.

d. The decoration of the bound book.

4. Correlated subject matter:

In geography the study of Egypt and the Nile Valley will recall this topic.

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*NOTE: For much of the information; for the organization of the material under the headings: "How the race provides itself with records, clothing, food, and shelter;" for helpful criticisms and advice, we are indebted to Prof. F. G. Bonser, Director of Industrial Arts, Teachers College, Columbia University.

5. Correlated arithmetic:
   Measurement, use of ruler, fractions, reognition of surface, forms, areas.
   Sets of problems. (Use manfacturers' prices or local store prices.)
6. Correlated literature and art:
   a. Literature:
      Fust and His Friends. Browning.
      Life of a Monk. Harding, *Story of the Middle Ages*, Chapter V.
   b. Pictures:
      Evolution of the Book, Alexander.
      The Parish Clerk, Gainsborough.
      Man Sharpening a Pencil, Rembrandt.
      Young Man Writing a Letter, Meissonier.
      The Old Scribe, Israel.
      Visions of St. Bernard, Lippi.

7. REFERENCE BOOKS: *Encyclopedia Brittanica* (11th Edition); *International Encylcopedia; Chambers Encyclopedia*; Butler, *Story of Paper Making*, Butler Paper Co., Chicago; *Story of Printing* (10-cent pamphlet); Clodd, *Story of the Alphabet*, Appleton Co.; C. B. Stilmar, *A Year's Work in Industrial Arts*, Teachers College Publication, Columbia University.

II. "*How the race provides itself with clothing.*"

1. Introduction:—Taking the child's own clothing as the point of attack let each child bring samples, with their prices if possible, of materials that are used for clothing in his home. Discuss these as to their various uses and value as clothing and classify them.

Discuss the materials used as clothing (wool, cotton, silk, linen, rubber, furs, leather) and the suitability of these materials for different seasons, climates and occupations.

Discuss the main qualities one would desire in material used as clothing: (a) that it be pure; (b) that it will not fade; (c) that it will not spot; (d) that it will not shrink.

2. Projects:

a. Woven rug, belt or bag, introducing a pattern; making of a sewing bag or any article requiring easy sewing (by the girls); make arm bands of felt or cloth. (Select one of these.)

b. Make charts of samples with their names, prices and widths. (Required.)

c. Make tests for pure wool and pure silk.

d. Make tests for fast colors and for setting colors.

e. Make tests for shrinkage.

f. Make collections of pictures that show weaving processes. Have each child keep in a notebook all directions given, and the result of all experiments made.)

3. Subject matter:

a. The sources for the raw materials used as clothing.

b. Their relative value as clothing materials; relative value of prices.

c. Short history of the evolution of weaving. (See outline at the end of this subject.)

d. Review the processes involved in the manufacture of woolen goods and cotton goods, which are taken up in the third and fourth grades.

e. Study the manufacturing processes of either silk or linen.

f. Compare the clothing industry with other industries.

g. Get statistics about the life and wages in a clothing factory.

h. What is being done to improve conditions in these factories?

i. Sweat Shops, Child Labor Laws, Consumers' League are important topics that should be discussed with the class. (See "*The Survey*" for information and pictures.)

4. Correlated subject matter:

In the geography topics (which will be studied some time during the year) the cotton producing states will help to recall this topic, as will also silk production in Asia, the wool countries of the world, and the flax producing areas.

In the history topics the story of the "Coming of the Factory to America" will shed light upon industrial conditions in the early nineteenth century and will show how the spinning loom, steam and the cotton gin helped to revolutionize the manufacturing of textiles.

5. Correlated arithmetic:

Estimate the cost of a child's outfit (boy's and girl's) either for a single garment or for a wardrobe. Compare the cost of a child's clothing for a month or a year with the salary budget of the father whose income is about the median income for your community.

6. Correlated literature and art:

a. Literature:

Song of the Shirt, Thomas Hood; *The Cry of the Children*, Mrs. Browning; *The Weaver's Dream*, Alice Cary; *The Mystic Weaver*, Anon; *The Shoemaker*, Alice Cary; *Spinning*, H. H. Jackson.

b. Pictures:

Priscilla Spinning, Barse; *The Traveling Shoemaker*, W. L. Taylor; *Gossips*, C. Marr; *The Shepherd*, Mauve; *The Shepherdess*, Millet; *The Endless Skein*, Knopf; *Her Trousseau*, Joseph Israel.

7. Reference Books:

Story of Silk, Story of Cotton, Story of Wool, Story of Flax. 10 pamphlets. (Can be purchased from the Dulany-Vernay Co., Baltimore.) Charlotte Gibbs, *Household Textiles*, Whitcomb & Barrow, Boston; Brooks, Eugene Clyde, *The Story of Cotton*, Rand, McNally & Co.; W. H. Dooley, *Textiles*, D. D. Heath & Co.; Alice M. Earle, *Home Life in Colonial Days*, Macmillan Co.; C. B. Stilmar, *A Year's Work in Industrial Arts*, Teachers College Publication, Columbia University; Carpenter, *How the World is Clothed*, American Book Co.; Dryer, *Elementary Economic Geography*, A. B. C.

III. " *How the race provides itself with shelter.*"

1. Introduction:—The reading might provide a motivation through castle life. The stories of Arthur and Robin Hood both suggest castles. A castle could be built on the sand table of small concrete blocks; if sand paper is used, then the architectural lines will be the most prominent idea.

Another introduction might be made through a discussion of the building going on in the neighborhood of the school. A visit to watch the men work on the building would prove stimulating and instructive.

2. Projects:

a. Clay tile or bricks.

b. Pottery—vases and dishes.

c. Concrete flower box. Select one.

d. Kite, bird, house, doll house (to be presented to one of the lower grades).

e. Wooden animals, wooden children of other lands.

f. Wooden box for filing card-catalogue.

g. Furniture for doll house.

h. Make a collection of samples of building materials with names and values. (Required.)

i. Make a collection of pictures of different styles of buildings.

3. Subject matter:

a. Types of building construction relative to material, function, and environment; tree-dweller's house; cave-man's house; cliff-dweller's house; house in tropical countries; Indian wigwams; Eskimo house; adobe house; castle; colonial house; pioneer's house; modern frame house; stone house; brick house; concrete house; steel structure. (A picture collection is almost an absolute necessity here.)

b. Building materials:

(1) Wood:

Chief kinds, their characteristics and uses.

Substitutes for wood. Wood finishes—polishes, stain, varnishes and veneers.

How cheap woods are made to resemble more expensive ones.

What effect this has on the furniture business.

(2) Earthen materials:

Bricks:

History—Sun-dried bricks used in ancient times by the Egyptians, Assyrians and Babylonians. Many of these have great historic value on account of the inscriptions on them. Bricks were introduced into England by the Romans.

The first bricks in America came from England. The value of bricks produced annually in our country now is over $78,000,000. How does this compare with the clothing industry?

Kinds—common brick, pressed brick, fire brick, pavement or vitrified brick, hollow tile.

Use of each kind—common brick for inside walls and foundations; pressed brick for finishing, both interior and exterior; fire brick for walls of fire-proof buildings and for lining the fire-pots of furnaces and stoves; vitrified bricks contain lime, are very hard and are used for paving; hollow tiles are used for drainage.

(3) Concrete:

The origin and composition of Portland cement. Its value as a building material.

Reinforced concrete.

(4) Stone.

(5) Marble.

(6) Lime.

(7) Glass.

(8) Slate.

(9) Metals:

Steel.

Copper.

Iron.

Sheet materials:

(10) Miscellaneous materials:

Thatch.

Paper.

Asbestos.

Skins.

Canvas.

c. Planning and furnishing a house:

(1) Plan—what to consider: situation, surroundings, drainage, exposure, building materials.

(2) Heating—open fires, stoves, steam, hot water, gas, electricity.

(3) Lighting—candles, kerosene, gas, electricity.

(4) Plumbing.

(5) Wall decorations—what to consider in selecting paper and pictures.

(6) Rugs and other floor coverings.

(7) Furniture—selected with reference to suitability, durability, and beauty (simplicity.)

4. Correlated subject-matter:

a. Lumbering as a topic in U. S. geography will reinforce this topic. In the study of each continent the lumber regions should be located and some information given as to the value of forests and how they are preserved.

b. Clay deposits should be located when the physiographic features of any of the continents are being studied.

c. Egyptian pottery as a useful invention correlates the history with this topic.

d. Sets of arithmetic problems.

5. Correlated literature and art:

a. Literature:—*Keramos*, Longfellow; *A Handful of Clay*, VanDyke; *The Hanging of the Crane*, Longfellow.

b. Pictures: *Song of the Hearth*, Theo. Grust; *Hanging of the Crane*, W. L. Taylor.

6. Reference Books: Chas. King, *Woodwork and Carpentry* (3 vols.); Atlas Portland Cement Co., *Concrete Construction about the Home and on the Farm; The History of Bricks*, Practical Reference Library. Encyclopedias. C. B. Stilmar, *A Year's Work in Industrial Arts*, Bureau of Publication, Teachers College, Columbia University; Carpenter, *How the World is Housed*, American Book Co.; Katherine Dopp, *Tree Dwellers*, University of Chicago Press; Katherine Dopp, *Early Cave Men*, University of Chicago Press; Katherine Dopp, *Later Cave Men*, University of Chicago Press; Cassel, *House Decoration*; Isabel Bevier, *The House, Its Plan and Decoration;* Dryer, *Elementary Economic Geography*, A. B. Co

IV. "How the race provides itself with food."

1. Introduction:—Much of this topic will be taught in the geography, physiology and arithmetic periods. The phases so taught should be gathered together and organized as a review around the topic "Foods." Where new phases appear they should be taught in the industrial arts period Children should become acquainted with the main food elements: protein, fat, carbohydrates, water, and mineral.

2. Projects:

a. Make soup, cook rice, cook eggs, boil potatoes, cream left-over potatoes, dry fruit and cook it, prepare raw vegetables and raw fruit for the table. (Select three.)

b. Sieve some old flour or meal to find out whether it is good to use.

c. Make experiments to show that a warm room will cause foods to ferment.

d. Make experiments to show that rotting fruit and vegetables will contaminate perfect specimens with which they come in contact.

e. Make a collection of food labels, wrappings, and containers.

3. Subject matter:

a. Needs of food:

(1) To make new tissue in growing bodies.

(2) To build up worn out cells.

(3) To supply heat and energy.

b. Kinds of food:

(1) Flesh-making or building up foods. These are divided into two classes: proteins—lean meat and fowl, cheese, dried peas and beans, milk; and mineral foods—green vegetables such as lettuce, spinach and cabbage.

(2) Heat and energy producing foods or starch and sugar foods—bread, rice, sugar, crackers, macaroni, potatoes and beans. These foods are called carbohydrates.

(3) Fat producing foods—fat meat, butter, nuts, sugar and starches.

(4) Foods containing water—all foods, especially fruit and vegetables.

c. A balanced diet:

(1) A proper diet should always contain some elements from each of the five classes of food.

(2) The proportion of food elements needed depends upon the age and the occupation of the consumer. A growing active child requires about an equal quantity of protein and carbohydrate,while a full-grown person needs several times as much carbohydrate (fuel food) as protein (tissue food.) A person who has much physical exercise needs more carbohydrates than one who leads a quiet life.

d. The care of food:

(1) Moist foods (milk, meat, bread, cake, vegetables) should be kept in a cool place to prevent fermentation.

(2) Dry foods (flour, meal, sugar, salt, dried meat and dried fruit) should be kept in a dry, well ventilated place.

(3) Milk should always be kept in a covered vessel and in one which has been sterilized by boiling.

(4) A refrigerator to be sanitary should be frequently and thoroughly cleaned.

(5) Cellars which are used as storage places for fruit and vegetables should have an annual coat of white-wash.

(6) Weevils and beetles infest flour, meal and breakfast foods which are not properly protected. Hence flour and meal should be put through a fine sieve before using.

(7) All food should be covered to protect it from flies which are great carriers of disease. The only way typhoid fever enters the body is through the alimentary canal.

e. The preparation of foods in mills, packing houses, dairies, canneries, and bakeries:—

(1) Use of machinery in the preparation of food.

(2) Pure food laws and government inspection.

(3) Utilization of by-products.

(4) Attractive wrappings for food products.

(5) Advertising of food products.

f. Transportation of food products:

(1) Live animals in cattle cars.

(2) Perishable products by refrigerator cars.

(3) Perishable and nonperishable products by freight, express and parcel post.

4. Correlated literature and art:

a. *The Windmill*, Longfellow; *The Mill*, Phoebe Cary; *Lucile*, Owen Meredith, Chap. XVII and XIX.

b. Pictures: *A Frugal Meal*, Josef Israel; *Happy Harvest*, Breton; *The Harvest Moon*, G. Mason; *The Wheat Field*, Rhine Print.

5. Reference books: Jordan, *The Principles of Human Nutrition*, Macmillan Co.; Gulick, *The Body at Work*, Ginn & Co.; C. B. Stilmar, *A Year's Work in Industrial Arts*, Teachers College Publication, Columbia University; Dryer, *Elementary Economic Geography*, A. B. Co.; Carpenter, *How the World is Fed*, American Book Co.

SUGGESTIONS FOR DISCUSSION

The following suggestions for a discussion were planned by Miss Olivia Hershner, Principal of the Lutherville School, who conducted a conference on industrial arts for all the Fifth Grade teachers of the County, March 9, 1918. The purpose of the conference was to make a survey of the work in order to determine whether the course is being interpreted by the teachers as efficiently as possible:

I. CLOTHING

1. Do you think if children were making a project with woolen material they would be interested in such things as the following?
   (a) Story of where wool is grown.
   (b) Story of how wool is made into cloth.
   (c) Some facts to remember in buying woolen clothing.
   (d) Some health problems in connection with woolen clothing.
2. Name some of the points, which you consider most important for a fifth grade child, in the study of "linen."
3. Do you think a fifth grade child should be able to discuss and apply the following suggestions?
   (a) Pressing and cleaning of clothes.
   (b) Learning to darn.
   (c) Patching saves clothing.
   (d) What it means to be well dressed.
   (e) The choice of colors for clothing.
   (f) Selecting a hat.
   (g) What to think about in buying materials; in buying ready made garments.
   (h) Some tests for choosing materials.
   (i) Ability to decide whether a pattern is printed, woven or embroidered.
4. How have you correlated the work on "clothing" with the geography for the grade? Do you wait until the subject comes up in geography or do you make the opportunity for teaching the geography that relates to some phases of the textile industries?

II. SHELTER

1. In teaching shelter, which is more important, to study the different kinds of materials such as wood, bricks, cement, etc,. from a subject matter standpoint, or in some such way as the following:—
   (a) Have children build a miniature house, discuss different kinds of materials and thoroughly study the one used.
   (b) Arrangement of rooms.
   (c) Furnishing a bedroom, dining room, kitchen.
   (d) Care of the home—dusting, cleaning, laundering, etc. Is this practicable? If not, what will take its place?

III. FOODS

The course of study outlines the subject matter on foods as follows:

1. Needs of food.
2. Kinds of food.
3. A balanced diet.
4. The care of food.
5. Preparation in mills, canneries, etc.
6. Transportation of food products.

Study the following outline and decide whether it is the more suggestive of the two:—

1. What we know about food and why we take it.
2. Luncheon at school; study of the proper food for school lunches.
3. The home supper.
4. The home breakfast.
5. The home dinner.
6. Some other facts as arrangement of kitchen, ways of caring for food, buying proper amount and kinds.

GENERAL QUESTIONS

1. Do you use your correlated literature and pictures simply for pleasure and added interest, or do you study the poems thoroughly and use the pictures for language work?
2. Which of the industries do you most enjoy teaching? Why?

INFORMATION ON PAPER-MAKING

(The type of detailed information a teacher of industrial arts should know about each of the five or six great industries that tie the busy life of the world together into one organic whole.)

(Adapted from *The Story of Paper Making* by F. O. Butler.)

I. History:

Men have in all ages been proud of their own achievements and have an instinctive desire to keep a record of those achievements so that the coming generations might profit by their observations and experiences.

The first method of transmitting knowledge was by oral tradition, but this often led to misunderstandings and imperfect knowledge, and as the races advanced in learning and civilization they realized that something more permanent and accurate was necessary; that without written records of some sort there could be little if any progress, since each generation would have to pass through the same stages of ignorance and inexperience. They naturally looked to nature for help and there found many materials which they used to record their history.

1. Stones heaped in piles to commemorate great deeds or events.* Frequently mentioned in the Bible.
2. Stone obelisks carved in the hieroglyphs of the Egyptians.
3. Clay tablets, carved and then baked in the sun. From these we get most of our history of the Assyrians and Babylonians.
4. Skins and bones of animals, also used by the Egyptians.
5. Wooden blocks and the bark of trees.
6. Ivory and wax tablets.
7. Metal plates, even of gold and silver.
8. Leaves of the olive, palm and poplar tree.
9. Papyrus, a reed-like plant found on the banks of the Nile. Its fibres were separated and laid edge to edge forming a flat surface of any desired size.
10. Parchment made from the skins of sheep and goats. It was first used in Asia Minor, and is used in our day for diplomas and some public documents.

II. Invention of paper:

Paper from wood pulp was invented by the Chinese in the second century, B. C. For many years they kept the process a secret, but in 704 A. D., the Arabs captured a city in China and took some prisoners, who were skilled in paper-making. From them the Arabs learned the art, and the knowledge then spread to Greece and Rome, and all parts of Europe.

"It has been suggested that in regions where the water-plant called the conforna grows, Nature herself teaches the method of making paper from vegetable fibers beaten to a pulp. The plant consists of slender green filaments, similar to what is called frog-spittle. The fibres are disintegrated by the action of the water, and rise to the surface as a scum. Driven hither and thither by the winds, tossed by the waves, and carried on resistelessly by the currents, this scum is at last beaten into pulp and matted together by the forces whose plaything it has been. Bleached

by the sun, it is finally, in some overflow of the water, cast upon the shores to dry, as veritable sheets of paper. But if Nature taught the process, man was slow to discover the teacher, or to learn the lesson."

It was in 1189 A. D. that the art of making paper from pulp was introduced into France. At that time the French people were far in advance of the English in cultivation and in regard to the refinements of life. They were energetic, and took great delight in construction, manufacturing, and building. Profiting by their knowledge, they prosecuted this art with such zeal that they were soon in a position to supply not only the wants of France, but those of surrounding countries as well. The people of the Netherlands were stimulated by the example of France, and for a long period the French and Dutch were the best, and indeed, almost the only papers produced in Europe. No reliable record can be established as to the first paper-making in England.

The first British patent for paper-making was granted to Charles Hildegard, February, 1665, for "the way and art of making blue paper used by sugar bakers, and others." A decade later, in January, 1675, was granted the second patent, already referred to in this chapter, which was for the making of "white paper for the use of writing and printing, being a new manufacture and never before practiced in any way in any of our kingdoms or dominions."

The beginning of the industry in America was almost coincident with the granting of patents for the manufacture of paper in England. A paper mill was established by William Rittenhouse, a native of Holland, at Germantown, Pennsylvania, in the year 1690, one of the builders and owners being William Bradford, a Philadelphia printer, who was afterward the owner of the first printing office in New York City. It was through him that Benjamin Franklin in 1723, received his first introduction to a temporary home, and employment in Philadelphia. The paper at this first American mill was made from linen rags, and the product was about two hundred and fifty pounds per day. The mill was on a stream subsequently called Paper-mill Run, which empties into the Wissahickon.

The manufacture made rapid strides in this young and growing country, so that in 1770 there were forty paper mills in the states of Pennsylvania, New Jersey, and Delaware. The advance among the leading nations of Europe during the same period was equally rapid. The manufacture was introduced into Massachusetts in 1717, and into Norwich, Connecticut, in 1758, but the progress in New England was not so rapid as in the states where it had been first established.

The first mill to be established in the northern part of New York was erected at Troy n 1793. About that time, or in 1801, the postmaster of the city issued a special plea under the heading, "Please save your rags," in which he said: "The press cont.ibutes more to the diffusion of knowledge and information than any other medium; rags are the primary requisite in the manufacture of paper, and without paper the newspapers of our country, those cheap, useful, and agreeable companions of the citizen and the farmer, which in a political and moral view are of the highest national importance, must decline." He then went on to show how, with sufficient rags, the paper mills of the state could meet all demands; how the patriotic saving of rags had been inculcated and was practiced in New England, saving to Connecticut alone $50,000 a year, and how the thrifty New England housewife had reduced the methods of saving to a science, or rather to a fine art, and closed as follows:

"The rich, who regard the interest of their country, will direct their children or domestics to place a box in some convenient place as a deposit for rags, that none may be lost by being swept into the street or fire; the sales of which saving will reward the attention of the faithful servant, and encourage the prosperous enterprise of prudence."

As we have already seen, the early paper-mills were greatly hampered by the scarcity of rags, and matters grew worse instead of better during the last fifteen years of the century. But the year 1800 brought some relief. Matthew Kooper, of France, who in the following year succeeded in making paper from straw and wood, invented a process by which 700 reams of clean, white paper were turned out weekly from such old written, printed, and waste paper as had previously been thrown away. In the face of a rag famine, such a process was a great boon to the paper manufacturer.

Well might the "Boston News Letter" of 1769 exclaim in quaint old rhyme:.

"Rags are as beauties which concealed lie,
But when in paper charming to the eye!
Pray save your rags, new beauties to discover,
For of paper truly every one's a lover;
By the pen and press such knowledge is displayed
As would not exist if paper was not made."

Man's untiring endeavor, his constant effort through the centuries to find something better suited to his needs, had in a figurative sense succeeded in turning stones into paper. It remained for two apprentices of Rittenhouse, who erected a third paper mill in Pennsylvania in 1728, to advance the claim that this could be done literally, that stone, the primitive material on which had been carved the first written characters of the race could be converted into a paper resembling asses' skins. We have no means of knowing what the so-called stone was, nor what process was followed, but it is safe to assume that both material and methods were similar to those employed at the present time in the manufacture of asbestos paper.

There are now about 1100 mills in the United States, with an annual output of about 4,000,000 tons. New York State produces the most, then comes Maine, Wisconsin, and Massachusetts.

Paper ranks fourth among the staple commodities. Foodstuffs first; clothing second; and iron and steel third.

III. Manufacture:

For over 100 years no material but wood was used to make paper, but now it is also made from cotton and linen rags, straw, hemp, esparto grass, and old paper.

For many years the work was all done by hand, but about 1800 a paper making machine was invented in France by Louis Robert. Shortly afterward Henry Fourdrinier invented a machine, which with a few modifications is the one used in all paper making factories today.

The first process in paper-making is to reduce the material to a pulp. With wood this is done either by boiling it in chemicals or by grinding it on great millstones. The rags for paper must first be thoroughly cleansed and bleached; they then go into a large boiler called "the beater," where they are threshed and beaten to a pulp. The pulp is spread in thin layers on a fine wire cloth which is kept in constant motion to drain off the water and web the pulp together; this web is then passed between heavy rollers and dried.

This forms print paper and wrapping paper, but for writing paper, the sheets must be dipped in a "size" made of animal glue or gelatine, which fills up all pores and gives a smooth surface; again it must be pressed and rolled.

To produce the various colored papers, aniline or vegetable dyes are mixed with the pulp.

The water-mark on paper is made by having the desired mark woven on a wire cylinder which is rolled over the web of pulp while it is on the wire cloth. This makes an impression which can always be seen by holding the paper to the light.

United States ranks first in paper-making, producing about one-third of the world's supply.

Some important mills are at Holyoke and Dalton, Mass.; Lockport and Chicago, Ill.; Hamilton, Ohio; and in all the New England States.

Some kinds of paper are: writing, drawing, printing, wrapping, blotting, felt, tissue, carbon, photographic, filter, paraffin, etc.

Uses of paper:

Bags, boxes, collars, cuffs, tubs, buckets, car-wheels, lead pencils, matting and rugs, dishes, drinking cups, boats, barrels, towels, napkins, etc.

Related knowledge:

Rolls for newspaper contain from 15 to 25 thousand feet or from 3 to 5 miles.

One-fourth of the output of paper is for newspapers.

In 1776 there were 37 publications, newspapers, and periodicals in the United States; in 1900 there were 20,806.

Only 2% of the drain of forests goes to paper-making, railroad ties and mine supports consume much more.

Wood pulp is measured and sold by the cord.

The chief woods used are Scotch fir, spruce, poplar, aspen, hemlock.

Linen and cotton rags make much finer grade paper than wood.

At Dalton, Mass., the United States government has mills in which the paper for paper money is made. Here they use only new linen rags.

There is a tariff of about 10% on all paper pulp and finished paper that comes into the country.

When the recent reciprocity bill was passed by Congress it permitted all wood for pulp cut from private lands in Canada, and print paper made from such pulp to be admitted free, but wood cut from government lands is still subject to duty.

Paper contributes more largely than any other material to the general progress of the country, for it is through it that new discoveries, theories, and inventions are proclaimed.

IV. Reference books:

Story of Paper-making. F. O. Butler. Butler Paper Co., Chicago, Ill.
Manufacture of Paper. C. T. Davis.
Encyclopedias.
Benjamin Franklin's *Autobiography.*

V. Other Aids:

The Survey Magazine, New York.
Pictures of the "Evolution of the Book" (obtainable from Dulany-Vernay Company, Baltimore).
Pictures of paper mills (obtainable from Champion Paper Co., Hamilton, Ohio).
Pictures of water-marks (obtainable from B. F. Bond Paper Co., Baltimore, Md.)

VI. Suggested questions for study of paper-making:

1. History:
   a. What led to the invention of paper?
   b. What materials were used before paper was invented?
   c. When and by what nation was it invented?
   d. What was the first paper made of?
   e. Why was it called paper?
   f. When and where was paper-making introduced into America.
   g. How does paper rank among the necessities of life?
2. Manufacture:
   a. Of what is paper made?
   b. What processes are included in the making?
   c. When and by whom was the first paper machine invented?
   d. What materials make the best paper?
   e. How are the different colors obtained?
   f. What is the origin of the water-mark, and how is it made?
3. Social Phase:
   a. What dangers are connected with the work of making paper from rags?
   b. How have these dangers been lessened by modern machinery?
   c. Is there any place where they use only clean rags for paper?
   d. How many hours do the employees in a paper factory work?
   e. What wages do they get?
   f. Do they have unions?
   g. What advantage is it for workmen to have unions?
   h. What is the law of our State regarding child labor'?
   i. Is it a good law? Why?
   j. How do the employees in a paper mill spend their leisure time?
   k. What is being done to help them spend their leisure wisely?
   l. What more might be done?
4. Commercial phase:
   a. Name some different kinds of paper.
   b. How are they different?
   c. Locate some important paper mills.
   d. How does the United States rank in paper making?
   e. Make a list of things made of paper.
   f. Make a collection of different kinds of paper with their values.

Information on the Evolution of Weaving

I. History:

The study of textile development is the study of race development. At first man and woman did the same work but with the discovery of fire came a division

of labor. The woman stayed by the fire to keep it burning and there developed the home industries while the man worked in the field or hunted in the forest.

An old Christian sarcophagus tells the story of God's condemning the world to labor by representing an ear of corn being given to Adam to signify that men should be tillers of the soil, and a sheep being given to Eve to signify that women should be weavers.

Ornamentation of the body with shells, feathers, paint, etc., preceded clothing, but as the race advanced in civilization the necessity for shelter and clothing led to their invention.

The idea of weaving was gotten from birds, spiders, and caterpillars and was first adapted to the interweaving of branches to cover the floors of damp caves.

1. Basketry:
   Belongs to the Stone Age.
   All savages have some form of basketry.
   Simplest form—plaiting of strips of bark, bamboo, grasses.
   Finest baskets made in Corea and Siam.
   Sacs and Fox Indians used strips of slippery elm and white ash bark, split with nails and crossed with cords.
   Basketry and matting are more beautiful among uncivilized people than among civilized people.
   Indians wove thoughts, hopes, prayers, into their baskets.
   Their patterns have never been surpassed and are still used in much of the present day weaving.
   Hats developed from baskets.
2. Pottery:
   Original meaning is coiled cooking basket.
   The first form was in baskets lined and covered with clay to preserve them in cooking.
   Then the clay was shaped without the basket.
   The oldest pots were coiled because baskets were coiled.
   Coiled pottery is still made by students of art but all of our most useful vessels are either made on the potter's wheel or are cast in molds.
3. Clothing:
   First, skins of animals, feathers, and paint.
   Second, bast cloth—made by pounding the inner bark of trees into a flat sheet. This bast cloth was used in Mexico, Central America and South America.
   The Hawaians excelled all other people in the making of bast cloth.
   Felt is still beaten out and not woven.
   The weaving of grasses, hemp, and hair for baskets suggested the weaving of material for clothing.
   The Textile Art proper is the use of yarn, thread, or braid or it is the art by which threads are crossed and interlaced to form a compact material.
   The Apaches were the most beautiful weavers. They are sometimes called the Navajo spiders.
4. Looms:
   a. Hand looms.
      (1) Simplest form in shape of letter "D," used by savages of British Guiana.
      (2) Rectangular loom of Indians, usually held in a vertical position and the weaver stood while working with a bone knife for separating the warp threads and a bone or a wooden needle.
      (3) Loom with heddle for lifting warp threads.
      (4) Loom with batten or bar for pushing the woof threads into place.
      (5) Loom with cloth beam for making a continuous cloth.
   b. Foot looms:
      (1) Similar to the hand looms with heddle, batten, warp beam and cloth beam, but both heddle and batten are worked by a treadle.
      (2) Much used in early colonial times. Still used by the Japanese and the people of the East Indies.
   c. Power looms:
      Used now in all factories and mills.

All motion controlled by water, steam, or electricity.

The first power loom was invented by Dr. Edward Cartwright, a clergyman from the south of England (1784). By 1800 his power loom came into general use and Parliament, in 1809 voted him a gift of £10,000 for the benefit his invention had rendered to manufacturing.

The Jacquard loom invented in 1702 by a Frenchman of that name is the most perfect loom for weaving intricate patterns, but it is very expensive and wears out easily.

For the story of the "Coming of the Factory to America," see the Fifth Grade Course in History, p. 522.

5. Fibers used in weaving:
   a. Vegetable:
      Fruit fibers—cocoanut and cotton.
      Stem fibers—flax, hemp, cedar.
      Leaf fibers—pineapple, plantain, palm.
      Grasses and bark.
      Egyptian rushes.
      Raffia.

   Lowest forms of vegetation (especially lichens and mosses) are not fibrous but are useful for dyes.

   b. Animal:
      Sinews of reindeer.
      Hair of llama, camel, goat, and horses.
      Wool of sheep.
      Silk of silk worms and of certain spiders in Java and New Guinea.
   c. Mineral:
      Glass.
      Asbestos.
      Gold.
      Silver.
6. Dyeing:
   Began in countries rich in flora.
   Dyes made from bark, sap, roots, leaves and fruit of various plants.

   Indians generally used bark for dyeing, frequently traveling miles to secure the needed bark.

   The ancient Phoenicians were noted for the gorgeous purple dye they used.

   The Hawaiians made figured goods by applying different colors with bamboo pens or brushes or stamps cut on bamboo strips. In some islands these stamps were made several feet square.

   Vegetable fibers do not take dye as readily as animal fibers.

   Silk dyes more easily than wool.

   Cotton requires a mordant to hold the colors.

   Vegetable dyes were formerly used exclusively but for the last twenty years nearly all our dyes are made from coal tar, from which over fourteen thousand colors have been produced.
7. Social aspects of weaving industry:
   a. Respect for primitive people.
   b. Appreciation of their struggles.
   c. Their heritage to us.
   d. Sympathy with toilers.
   e. Sweat-shop system.
   f. Consumers' League.

REFERENCE BOOKS: O. T. Mason, *Woman's Share in Primitive Culture*, Chap. III–V; O. T. Mason, *The Origin of Inventions*, Chap. V–VII; Carpenter, *How the World is Clothed*, American Book Co.: Encyclopedias; Kinne and Cooley, *Shelter and Clothing*, The Macmillan Co.

FURTHER REFERENCES AND AIDS FOR THE TEACHERS

NOTE:—Writing to business houses for information and samples gives the best kind of motivation for letter-writing.

Helpful material for the work may be obtained from the following addresses:

Crop Plants for Paper Making by C. J. Brand. 1911. 10 cents. Supt. of Documents, Washington, D. C.

The Biography of a Book. 2 cent stamp. Harper Brothers, New York City.

The Story of the Making of a Book. 1914. 2 cent stamp. Charles Scribner's Sons, New York.

Cotton Growing by D. A. Tompkins, Charlotte, North Carolina. 2 cent stamp.

City of Manchester, N. H., and the Amoskeag Manfg. Co. 6 cents postage. Chamber of Commerce, Manchester, N. H. (Contains pictures of cotton and woolen manufacturing.)

Linen, jute and hemp industries in the United States, by W. A. G. Clark. 1913. Supt. of Documents, Washington, D. C., 25 cents.

A short description of silk and silk manufacturing. 8 cents postage. Cheney Bro., South Manchester, Conn.

Silk culture and manufacturing shown progressively. $1.25 (an exhibit.) Belding Bros., Rockville, Conn.

Pamphlet showing pictures of silk manufacture. 6 cents postage. Belding Bros., Rockville, Conn.

The silk industry, from the worm to the wearer. Express charges. M. Hemingway and Sons Silk Co., 890 Broadway, New York.

A short history of American shoemaking, by Fred. A. Gannon. 2 cents. (Secretary, New England Shoe and Leather Association, 166 Essex St., Boston.)

Rubber from forest to foot. 1913. 2-cent stamp. United Rubber Co., Broadway & 58th St., New York.

From wool to cloth. 1911. 2 cent stamp; American Woolen Company, Boston, Mass.

Annual Report, 1911. Natl. Lumber Manufacturing Association, Otis Building, Chicago, Ill.

Samples of wood finishes. Sherwin-Williams Co., Baltimore, Md.

Small wood panels finished in different ways. S. C. Johnson & Sons, Racine, Wis.

Samples showing the different stages of flour manufacture. (Pillsbury Flour Co., Minn.—Express charges must be guaranteed.)

Cocoa exhibit. Walter Lowney Co., Boston, Mass.

Exhibit of cocoa manufacture. Hershey Chocolate Co., Hershey, Pa.

Bottles of samples of cereals. Postum Cereal Co., Battle Creek, Mich.

Samples of spices. McCormick and Co., Baltimore, Md.

Samples of tallow and other by-products. Morris & Co., Chicago, Ill.

Exhibit showing wheat, flour, barley and barley malt. Horlick's Malted Milk Co., Racine, Wis.

Concrete Construction about the home and on the farm. With samples. Atlas Portland Cement Co., Broad St., New York, N. Y.

Bottles showing the stages in the manufacture of Portland Cement. German-American Portland Cement Works, 140 S. Dearborn St., Chicago.

HOUSEHOLD ARTS

I. Aims:

1. To cultivate an appreciation of the home, and prepare the girls to be more efficient home-makers.
2. To form right habits: attention, neatness, order.
3. To teach relation of food and clothing to good health.
4. To develop reasoning, originality, discrimination and invention.
5. To train in economy of time and material.
6. To awaken an interest in social problems; as sweat-shop labor and factory conditions, for example.
7. To train in business methods.
8. To inculcate, through class work, unselfishness, courtesy and and pleasing manners to others.
9. To develop the sense of beauty and fitness.

The course in the elementary school gives a survey of the whole field of Household Arts, presented in the form to suit the previous training and ability of the pupils. Considerable general information has been given the pupils in the previous grades through the industrial arts course. Food, clothing and shelter are important topics even in the primary grades. This furnishes a basis for the specific work of the special courses which begin in the sixth grade and are taught by special teachers of Household Arts. The lessons have been planned to form a definite sequence, both for the grade and the whole course, continuing through the four years of the high school.

Since the understanding of the underlying principles in working processes makes knowledge transferable and therefore most valuable, practice and theory are combined in every lesson. The degree of emphasis, however, varies with the previous training of the pupils. In the sixth grade special attention is paid to the technical processes with the theory necessary for a knowledge of materials and an understanding of the working principles involved. Each succeeding year increased emphasis is placed on the scientific side of the work in proportion as the establishment of correct habits renders the pupil more skillful, and through the practical work, automatic control is secured.

Frequent reviews are necessary. Important lessons are repeated each year, variation being given in the practical application of the principles involved.

The pupils should become familiar with the technical terms which occur in the study of foods and textiles, and the simple tests for their identification. The formation of correct habits is very

important in elementary work. Therefore emphasis should be placed on neatness, accuracy, quickness, independence. A few minutes spent in review or an occasional contest are valuable factors in securing this result.

The students should *know* what they are going to do *before* starting. Outlining the steps of the work in proper sequence before starting is a good practice for beginners.

Special seasons of the year—Thanksgiving, Christmas and Easter—should be emphasized and appropriate lessons planned.

Home work may be encouraged and the interest of the home may be increased by allowing certain credits for duties performed under home supervision. This is one of the new and unsettled problems and requires carefully planned and supervised procedure, but may prove a valuable means of securing the co-operation of the home and school.

II. Class spirit—discipline:

The Household Arts class furnishes large opportunities for life experiences. The home atmosphere should be cultivated. Unselfishness, courtesy, self-control are essential to the success of the home spirit. Orderliness is necessary for satisfactory work. Liberty, not leisure, freedom and ease, not disorder, is the goal. Responsibility placed upon pupils is valuable training in independence.

III. Note-books:

The student's note-book contains the record of the lessons, and other information needed for later reference.

The book should be kept neat and up to date. Frequent examinations and marking of books help in securing satisfactory results.

IV. Illustrative material:

Valuable illustrative material can be found in magazines, daily papers, advertisements and dealers' catalogues, which, collected by pupils and placed on the bulletin board, will add to the interest of the lessons. This selection of proper material is valuable training in discrimination and judgment.

Many firms and manufacturing concerns will send materials as advertisement, if requested. Pictures, photographs, post-cards are helpful aids to the teacher.

Interesting charts can be made by the class, showing source, production, manufacture of various products. The blackboard should be used for sketching and explaining or outlining important points in the lesson.

The Government Bulletins are valuable reference material.

V. Special lessons:

The month of December should be set apart for Christmas work. The Christmas spirit—the spirit of giving should be emphasized. The preliminary lesson decides the success of the month's work. Magazines, former gifts, and other available materials brought to the class by teacher and pupils, afford a basis for discussion and selection of suitable gifts, and arouse enthusiasm. Final decisions should be made at this time. Appropriate gifts to parents should be a conspicuous part of the plan. Simple gifts to hospitals, shut-ins, or the less fortunate should form a part of the Christmas work, where possible. All gifts should be simple and inexpensive, the ethical value being emphasized. Fancy, over-decorated work should be discouraged.

To be most valuable the Household Arts courses must be closely related to the other interests of the pupils—the grade work, the home, and the community.

VI. Correlation with grade work:

There must be real correlation of sympathy and interest, and a general knowledge of both phases of work by the special and grade teachers if successful correlation of subject-matter be attained.

There are many opportunities for mutual helpfulness:

A. Conferences with principals and teachers.

B. Visiting class work.

The grade teacher is a welcome visitor to the home economics lessons of her class.

It is equally valuable for the teacher of Household Arts to visit the grade room and see the class under normal conditions.

C. Subject-matter:

Any weakness shown by the class in any of the fundamentals should be reported to the grade teacher.

English:

Composition on special topics relating to home economics, the special teacher marking for subject-matter, the grade teacher for English.

Arithmetic:

Calculating costs of lessons, menus, and clothing budgets.

Study of comparative costs and availability of materials used.

Geography:

Location of products.

Climate, soil, latitude.

Manufacturing centers.

Commercial routes.

In the same way correlation can be made with history, physiology, art, and other school subjects.

Correlation with the home:

A. Discussion and comparison of home and school recipes and methods.

B. Collecting and filing favorite home recipes.

C. Afternoon teas prepared and served by various classes to their mothers.

D. A note or occasional visit to the home of an absent or sick child.

E. Home work in practical affairs—cooking and sewing, in which parents will be interested and willing to co-operate.

Correlation with community:

A. Planning a tea or furnishing refreshments for a meeting of the Patrons' Club.

B. Inviting trustees and others interested in school affairs to one of the meals prepared by a class.

C. Talking to the neighborhood clubs on topics relating to Household Arts.

D. Arranging an exhibit of class work and inviting patrons and friends of the school.

E. Inviting parents of contesting classes to a contest in cooking and sewing.

REFERENCES: Kinne and Cooley, *Food and Household Management*, Macmillan; Kinne and Cooley, *Shelter and Clothing:* Cooley, *Domestic Art in Women's Education*, *American School of Home Economics, Library of Home Economics;* Richards, *The Cost of Living*, Wiley; Richards, *The Cost of Food*, Wiley; Richards, *The Cost of Shelter*, Wiley; Richards, *The Cost of Cleanness*, Wiley; Richards, *The Art of Right Living*, Wiley; Holt, *Care of Feeding Children*, Appleton; Rose, *The Baby*, Cornell Reading Course; Hunt, *The Daily Meals of School Children*, U. S. Bureau of Education, Bulletin, 1909, No. 3; Conn, *Bacteria, Yeast and Molds in the House*, Ginn. Farmer, *Boston Cooking School Cook Book*, Little, Brown; Parloa, *Home Economics*, The Century Co.; Clark, *The Care of the House*, Macmillan, White, *The Fuels of the Household*, Whitcomb and Barrows; Balderston, *The Laundry*, Balderston; *Dressmaking up-to-date*, Butterick Pub. Co.; *The Sewing Book*, Butterick, Pub. Co.; *Embroidery-up-to-date*, Butterick Pub. Co.: Ortner, *Practical Millinery;* Gulick, *The Body at Work*, Ginn; Pyle, *Personal Hyiene;* Jordan, *The Principles of Human Nutrition*, Macmillan; Brookman, *Family Expense Account*, D. C. Heath & Co.; *Bulletins*, U. S. Department of Agriculture.

GENERAL OUTLINE FOR THE COURSE IN FOODS

I. The three essentials to life:
- Fresh air.
- Pure water.
- Good food.

II. The kitchen:
- Location.
- Arrangement.
- Utensils.
- Care.

III. The stove:
Kinds.
Construction.
Comparative value in efficiency and cost.

IV. Fuels:
Kinds.
Production.
Comparative value in efficiency and cost.

V. Water:
Source.
Characteristics.
Dangers in drinking water.
Sources of contamination.
Purification of water.

VI. Food:
A. Source:
1. Animals.
2. Vegetables.
3. Minerals.

B. The "Five Food Principles" and their function in the human body:
1. Protein.
2. Carbohydrates.
3. Fat.
4. Mineral.
5. Water.

C. Selection of food:
1. Test for best of kind.
2. Dangers of impure foods:
a. Adulteration.
b. Preservatives.
3. Economy in buying:
a. In season.
b. In quantity.
4. Care in the home:
a. Cleanliness.
b. Proper receptacles.
c. Proper temperature.
5. Preservation of foods:
a. Cause of decomposition; study of bacteria; yeast, mold.

D. Preparation of food for cooking:
1. Washing.
2. Paring.
3. Peeling.
4. Scraping.

E. The digestive process:
1. The human body.
a. Structure.
b. Waste and repair.
2. Alimentary canal:
a. Principal divisions.
b. Functions of each.
c. Excretions.

VII. Practice in the preparation of food materials:
A. Protein:
Eggs, meat, fish, milk, cheese, legumes.
B. Carbohydrates:
Vegetables, cereals, sugar.
C. Fat:
Cream, butter, oil.
D. Mineral:
Fruit, green vegetables.
E. Water—beverages:
Tea, coffee, postum.
F. Uses of left-overs:
Meat, vegetables, cheese, and bread.
G. Substitutes for meat:
Cheese, legumes, eggs.

VIII. Preparing food to meet special conditions
A The baby.
1. Natural feeding.
2. Artificial feeding.
a. Care of bottle.
b. Care of milk.
c. Sterilization.
B. The child at school.
1. The lunch box.
C. The invalid.
1. The invalid's tray.

IX. Preparation and serving meals:
A. Planning.
1. The menu.
a. To meet definite conditions; number, age, sex, occupations, cost.
b. Proper combination of foods.
2. The work:
a. Assignment of duties.
b. Plan cooking so that all the food will be ready when needed.
3. Practical work:

B. Hospitality:
1. Writing invitations to the guests.
2. Duties of hostess.

C. Table setting:
1. Simple.
2. Attractive arrangement.
3. Place cards.

D. Serving the meal:
1. Without a maid.
2. With a maid.

X. Sanitation and hygiene:

A. Care of rooms.
a. General appearance.
1. Cleanly, attractive, orderly.
2. Flower boxes containing parsley, mint or flowers.
b. Material for distribution.
Placed in proper receptacles and neatly arranged.
c. Desks.
1. Have a definite order for desks.
2. Place the plan for arrangement in a conspicuous place, so that it can be easily seen.

B. Housecleaning:
Kitchen furniture:
1. Cupboards.
2. Washing dishes and utensils.
3. Cleaning metals.
4. Care of stove.
5. Refrigerator.
6. Sweeping and dusting.
7. Garbage pail.
8. Sinks and laundry tubs.

C. Laundry work.

D. Personal hygiene:
1. Appearance.
2. Cleanliness.
3. Correct posture.
4. Care of skin, nails, etc.

E. Care of food:
1. Producer.
2. Retailer.
3. In the home.

XI. Notebooks:
1. Daily record of lessons.
2. Systematic and orderly.
3. Special notes.
4. Market frequently.

XII. Suggested plan of lesson:

A. Laboratory work.
1. Recipe and outline of lesson on blackboard.
2. Preparation of class—uniforms and previous notes. Hands washed.
3. Review of preceding lesson, connecting with new one.
4. Recipe read.
5. Division of recipe for individual work; results written on the blackboard.
6. Recipe and method studied quietly.
a. Utensils needed.
b. Material needed.
7. Discussion and questions *before* beginning work.
8. Preparation for practice work.
a. Selection of utensils.
b. Getting material.
c. Planning for cooking product.
9. Preparing and cooking the food.
10. Arranging utensils for dish washing.
11. Special notes.
12. Outline for study of next lesson.
13. Criticism of finished product.
14. Summarizing important points in the lesson.
15. Estimating cost of lesson.
16. Dishwashing and finishing the work.

XIII. General outline for study of lessons:

A. Classification of food according to kingdom.
1. Vegetable.
2. Animal.
3. Mineral.

B. Classification of food according to food principle.
   1. Carbohydrate.
   2. Protein.
   3. Fat.
   4. Mineral.
   5. Water.

C. Selection of food:
   1. In proper season.
   2. Tests for best kind.
   3. Dangers of impure foods.

D. Care in the home.

E. Preparation of food for cooking.

F. Proper temperature for cooking. Tests.

G. Cost of lesson.
   Comparative study of home and commercial problems.

H. Place in diet.
   1. Adult.
   2. Child.
   3. Proper combination in meals. (Illustration.)

I. Correct method of serving.

J. Correct method of eating.

K. Correlation with grade work.

Examinations or Tests:

Short tests may be given on the completion of the series of lessons These should consist of one or two questions given in the form of a regular lesson period. Term examinations are held at stated times, the records being placed on the pupils' reports. The time for the examinations should not exceed an hour, the remaining half hour being used in lessons on personal hygiene or other talks helpful to girls.

Notebook Record of Lesson:

TYPE

Lesson———— Date————

Subject of lesson
Large recipe
Method
Class recipe
Material—quantity used—cost
Special notes
Outline for next lesson

SIXTH GRADE

Aim:

1. To give skill in handling materials.
2. To begin the study of food composition.
3. To study the underlying principles in cooking.
4. To train in accuracy and neatness.
5. To train in business methods.
6. To train in hospitality through planning and serving meals.
7. To study personal hygiene.

Practical work:

Methods: While we desire skill in the practical work, we desire that the skill may be directed by an intelligent understanding of principles upon which skill may achieve successful results. Lessons

that require long or intricate cooking should be avoided in elementary classes. Special emphasis should be placed on the method of work and results obtained. It is important to show reasons for failure in the finished product. Satisfaction with poor results is dangerous to cultivation of proper ideals; therefore comparison and criticism of the finished product are necessary and important, and should form a prominent part of each lesson.

Lesson I.

A. Introduction.
1 Establish relationship with the class.
2. Talk on the preparation for work.
3. Directions for uniforms.
4. Study equipment.
a. Uses of utensils.
b. Care.
c. Materials used in construction.
1. Suitability.
2. Economy.

B. *Outline for next lesson:* Fire and fire-making.

REFERENCES: Kinne and Cooley, *Foods and Household Management*, Chap. III; Williams and Fisher, pp. 7–23.

Lesson II:

A. Review outline: stove, fuel, fire-making.

B. Discuss duties of officers.

C. Teach measurements and abbreviations.

D. Give rules for dishwashing.

Practical work:

Housecleaning: arranging equipment.
Dishwashing.

Outline for next lesson: Beverages (water).

REFERENCES: Kinne and Cooey, *Foods and Household Management*, Chap. V; Williams and Fisher, pp. 23–31.

Lesson III:

A. Water:
1. Characteristics
a. Hard.
b. Solubility.

B. Tests:
1. Temperatures—freezing, lukewarm, simmering, boiling.
2. Use of thermometer.
3. Meaning of hot, boiling, simmering, steeping, scalding.

Practical work: Beverages; Lemonade tea.

Outline for next lesson: Fruit.

REFERENCES: Kinne and Cooley, *Foods and Household Management*, Chap. VI; Williams and Fisher, p. 226.

Lesson IV:

A. Study of Food:
1. Function.
2. Why cooked.
3. Methods of cooking.

B. The "Five Food Principles."
(Start chart for class work.)

C. Fruit:
1. Classification.
2. Composition—water and cellulose chiefly.
3. Value in diet.
4. Meaning of baking.

Practical work: Baked apple.

Outline for next lesson: Cereals.

REFERENCES: Kinne and Cooley, *Foods and Household Management*, Chap. VIII; Williams and Fisher, p. 73.

Lesson V:

A. Cereals. Carbohydrates.
1. Review outline.
2. Classification.
3. Composition.
4. Food value.
5. Definition of boiling and steaming.

Practical work: Cream of Wheat.

Outline for next lesson: Vegetables.

REFERENCES: Kinne and Cooley, *Foods and Household Management*, Chap. VII; Williams and Fisher, p. 235.

Lesson VI:

A. Vegetables:

1. Review outline.
2. Classification of green vegetables.
3. Food value.
4. Suitable seasons for use.
5. Comparative cost.

Practical work: Any green vegetable in season.

Lesson VII:

A. Vegetables. Carbohydrates.

1. Review outline.
2. Study potato.
   a. Composition.
      1. Grate, and wash out starch.
      2. Show proportion of water, cellulose, starch.
      3. Test for starch: Iodine gives blue color, heat thickens.

Practical work: Baked Potato.

Outline for next lesson:

REFERENCE: Williams and Fisher, p. 60.

Lesson IX:

A. Use of left-overs. Introduction of Fat.

1. Review carbohydrates.
2. Fat.
   Food value.
3. White sauce.
   Methods of combining liquid and starch to prevent lumping.

Practical work: Creamed potatoes.

Outline for next lesson: Eggs.

REFERENCES: Kinne and Cooley, *Foods and Household Management*, pp. 138–146; Williams and Fisher, pp. 83–90.

Lesson X:

A. Eggs. Protein.

1. Structure.
2. Composition
3. Study of albumen.
4. Tests for protein.
5. Food value.

Practical work:

Soft and hard cooked eggs.

Poached eggs on toast.

Lesson XI:

A. Eggs (continued):

1. Selection.
2. Tests for fresh eggs.
3. Care and preservation in the home.
4. Effect of beating air into eggs.

Practical work: Omelet.

Outline for next lesson: Milk.

REFERENCES: Kinne and Cooley, *Foods and Household Management*, pp. 146–154; Williams and Fisher, pp. 92–99.

Lesson XII:

A. Milk:

1. Composition. Show.
2. Food value.
3. Digestibility.
4. Care—producer, retailer, home.
5. Milk products.

Practical work: Junket.

Lesson XIII:

A. Milk and eggs:

1. Milk thickens with eggs.
2. Custards.
   a. Important points in making.
   b. Tests for finished product.
   c. Food values.

Practical Work: Soft and baked custards.

Outline for next lesson: Meat.

REFERENCES: Kinne and Cooley, *Foods and Household Management*, pp. 209–221; Williams and Fisher, pp. 144–146.

Lesson XIV:

A. Meats:

1. Classification.
2. Kinds of meat.
3. Structure. Experiment.
4. Composition.

Test effects of hot water, cold water, salt, dry heat on beef.

Practical work: Beef Tea.

Outline for next lesson: Meat—location and uses of cuts.

REFERENCES: Kinne and Cooley, *Foods and Household Management*, pp. 209–221; Williams and Fisher, pp 148–150; 188–191.

Lesson XV:

A. Meats (continued):
1. Food value.
2. Digestibility.
3. Location and uses of cuts.
4. Method of cooking tender meats.
a. Broiling.
b. Roasting.

Practical work: Broiled chops.

Lesson XVI:

A. Meats (continued):
1. Comparative value of tough and tender meats.
a. Cost.
b. Food value.
c. Method of cooking tough meats.

Practical work: Beef stew.

Outline for next lesson: Flour. Process of manufacture.

REFERENCES: Kinne and Cooley, *Foods and Household Management*, pp. 126–129; Williams and Fisher, pp. 113–118.

Lesson XVII: Suggested outline for batters and doughs.

A. Flour:
1. Kinds.
2. Comparative value.
3. Wheat flour
4. Tests for gluten.
5. Points to be considered in flour mixtures:
a. Consistency:
1. Classes.
2. General proportion of liquid to flour.
b. Leavening agents:
1. Kinds.
2. How produced.
3. Proportions used—variations.
c. Methods of combination:
1. Muffin.
2. Biscuit.
3. Cake.
d. Motions used—effect:
1. Stirring.
2. Beating.
3. Cutting and folding.
e. Temperatures of cooking:
Oven:
1. Hot.
2. Moderate.
3. Slow.
4. Tests: hand, flour, paper.
f. Time for cooking.
g. Test when done.
h. Rules for bread and cake-making.

Practical work: Popovers. Leavening agents: air, steam.

Outline for next lesson: Corn and its products.

REFERENCES: Kinne and Cooley, *Food and Household Management*, pp. 133–135; Wilson, *Domestic Science in Elementary Schools*, pp. 83–86, U. S. Bulletin.

Lesson XVIII:

A. Corn and its products:
1. Cornmeal:
a. Composition.
b. Food value.
c. Comparative cost.
2. Study leavening agent—soda and acid.

Practical work: Corn griddle cakes, lightened with soda and sour milk.

Outline for next lesson: Spices and molasses.

REFERENCES: Kinne and Cooley, *Foods and Household Management*, pp. 12, 13; Green, *Food Products of the World*.

Lesson XIX:

A. Molasses—spices.
1. Food value.
2. Study leavening agent—soda and molasses.
a. Action.
b. Proportions.

Practical work: Gingerbread.

Outline for next lesson: Baking powder.

Lesson XX:

A. Baking powder: leavening agent.
1. Composition.
2. Experiments showing action.
3. Proportion used.

Practical work: Whole wheat muffins.

Lesson XXI:

A. Study of doughs.

Practical work: Biscuits.

Outline for next lesson: Cocoa bean and its products.

REFERENCES: Kinne and Cooley, *Foods and Household Management*, pp. 75–77; Williams and Fisher, pp. 314–316.

Lesson XXII:

A. Review of flour mixtures.

B. The cocoa bean.

Products:

a. Comparative cost.

b. Comparative food value.

Practical work: Cocoa, cocoa shells.

Lesson XXIII:

Planning breakfast for six. (See VIII, General Outline.)

REFERENCES: Kinne and Cooley, *Foods and Household Management*, Chap. XVI, XVII.

Lesson XXIV:

Serving breakfast.

Lesson XXV:

Discussion and criticism of breakfast and service.

Personal hygiene.

REFERENCE: *Physiology*.

Outline for next lesson: Cheese.

REFERENCES: Kinne and Cooley, *Foods and Household Management*, pp. 154–156; Williams and Fisher, p. 99.

Lesson XXVI:

A. Cheese:

1. Process.
2. Varieties.
3. Composition.
4. Food value.

Practical work: Welsh rarebit.

Lesson XXVI:

A. Cake:

1. Classes.
2. Rules for baking.
3. Icing.
4. Food value.

Practical work: Simple cake. Icing.

REFERENCES: Kinne and Cooley, *Foods and Household Management*, pp. 179–183; Williams and Fisher, pp. 264–271.

Lesson XXVIII:

A. Salads:

1. Varieties.
2. Kinds of salad dressing.
3. Food value of salads.
4. Place in diet.
5. Important points in making salads

Practical work: Potato salad; cooked dressing.

REFERENCES: Kinne and Cooley, *Foods and Household Management*, pp. 247–253; Williams and Fisher, 252-256

Outline for next lesson: The lunch basket.

Lesson XXIX:

The school-lunch: planned for a special person: the school-girl.

1. Nutritious.
2. Appetizing.
3. Attractive.
4. Sanitary.

Practical work: Packing a school lunch.

Outline for next lesson: Gelatine.

REFERENCES: Kinne and Cooley, *Foods and Household Management*, p. 255; Williams and Fisher, pp. 158, 163.

Lesson XXX:

A. Desserts:

1. Study of gelatine.
   a. Source.
   b. Food value.
2. Review custards.

Practical work: Gelatine with soft custard.

Lesson XXXI:

A. Frozen desserts:

1. Principle of freezing—experiment.
2. General rules.

3. Food values.
4. Digestibility.

Practical work: Ice cream and ices.

REFERENCES: Kinne and Cooley, *Foods and Household Management*, pp. 261–262; Williams and Fisher, pp. 276–279.

Lesson XXXII:

Inventory: packing equipment.

NOTE: Special lessons to be given at appropriate times.

Housecleaning lesson.

Thanksgiving lesson: Cranberry sauce and tarts.

Christmas lesson: Candy.

Reviews and written tests, not to exceed one hour in length.

Half hour talks on subject important to girls.

Contests in practical cookery.

Exhibit of year's work.

CLOTHING AND TEXTILES

The course extends from the sixth grade elementary through the fourth year high school; but much foundation work is done in all the earlier elementary grades. Food, clothing, and shelter are important topics even in the primary grades.

The sixth grade is taught by the class teacher; the succeeding grades by the special teacher of Household Arts.

The aim has been to present the subject through a logical and systematic arrangement of lessons. The first lesson on weaving reviews previous work and leads to darning. The study of textiles begins in the first lesson with the study of warp and woof of material.

The next topic is clothing which furnishes the motive for the study of commercial patterns, the principles involved in proper selection of material, knowledge and use of sewing stitches, and important lessons on the relations of clothing to health. It is intended to be educational as well as technical and if either is sacrificed the value is correspondingly weakened. This subject is especially adaptable to close correlation of school with the home and community. While the course should give technical skill in the practical processes involved, it should also stimulate thought, train in judgment and initiative, and arouse an interest in economic problems.

*In the sixth grade the pupils are given the problems of making a complete set of underwear and a dress for a twenty-six inch doll. Commercial patterns are used and the method of procedure is identical with the selection and making of an outfit for the pupils' own use.

The reasons for using the doll as the basis of the work is as follows:

1. Of interest to girls—it relates directly to life.
2. Interest is maintained because more rapid changes of work are possible.
3. Economy in time and material

4. As any model, it affords a means of working out principles and seeing results more quickly than in large size.

5. To teach care of child:
   a. Bathing.
   b. Hair—protect hair with cap.
   c. Eyes—danger of allowing too strong light.
   d. Proper clothing.

Making clothes for doll.

1. To develop the mother instinct.
2. To teach care of children.
3. To cultivate interest in others.

Special aims:

1. To teach correct methods of sewing with a direct application to making the girl's clothing, using the smaller clothes as a means. Dolls' patterns are made on the same plan as the larger ones.

2. The selection of material should be made to meet stated conditions, as age and use.

Use made of doll:

Some classes donate dressed dolls to some unfortunate children or use them at school fairs, or keep the clothes for themselves which is their privilege. In any case the school doll must be kept at school.

*Note: The dressing of the doll is not compulsory for all classes. It has been found that some sixth grade girls have outgrown their interest in dolls. The course should be made flexible enough to allow as a substitute a more real project like the making of garments for themselves or for Red Cross purposes.

3. All material for the doll's clothes are furnished by the school.

Important lessons—darning, patching, buttonholes, should be practiced until satisfactorily done. This can be done by having material prepared, on hand, and ready for use during periods when the students are compelled to wait for the teacher. A record of the required pieces of work should be kept, each piece checked off as completed. Whatever the plan adopted, it should arouse the interest and spirit of competition.

General Outline for Clothing and Textiles

I. Equipment:
   A. History and manufacture of utensils.
      a. Needle.
      b. Thimble.
      c. Scissors.
   B. Care and use.
      a. Utensils.
      b. Room.
      c. Desk or table.

   Reference: Butterick, *The Sewing Book.*

II. Physiology and Hygiene:

A. Personal:
1. Position.
2. Relation of light.
3. Care of hands, nails, hair.
4. Dress, apron.

B. Clothing:
1. Hygiene of clothing.

a. Adaptability to climate and conditions.

b. Effect of improper styles.

c. Dangers of dyes and improper conditions under which made.

REFERENCE: Kinne and Cooley, *Shelter and Clothing*, p. 303.

III. Study of textiles:

A. Fibres.
1. Classification.
a. Vegetable.
b. Animal.
c. Artificial.
2. Distinguishing characteristics

B. Production and manufacture.
1. Cotton.
2. Wool.
3. Linen.
4. Silk.

C. Comparative value.
1. Cost.
2. Efficiency.

D. Tests for identification.
1. Physical.
2. Chemical
3. Microscopic.

REFERENCES: Gibbs, *Household Textiles;* Dooley, *Textiles;* Kinne and Cooley, *Shelter and Clothing.*

IV. Planning garments:

A. Selection of material.
1. Use to be made of garment.
2. Suitability.
3. Appropriate style.
4. Cost.
5. Durability.

B. Color and design.

REFERENCES: Kinne and Cooley, *Shelter and Clothing;* Butterick Company, *The Sewing Book;* Butterick Company, *Dressmaking up-to-date.*

V. Commercial patterns:

A. Different makes. Distinguishing characteristics.

B. Methods of selection—age, size, height.

C. Principle of selection—use, suitability.

D. Interpretation of markings.

E. Test and simple alterations.

F. Economize placing on material.

REFERENCES: Butterick Company, *Dressmaking up-to-date;* Butterick Company, *The Sewing Book* Kinne and Cooley, *Shelter and Clothing*, Chap. XIV.

VI. Making garments:

A. Cutting and fitting.

B. Hand sewing.
1. Stitches.
a. Temporary.
b. Permanent.
c. Uses, methods of making.

d. Comparative strength.
2. Practice pieces: canvas, muslin.

Important—as means.

Each stitch to be learned as the need for its use arises.

C. Sewing machines:
1. Makes.
2. Practice in use.
3. Care of machines.

VII. Care of clothing:

A. Suggestions for daily use:
1. Airing.
2. Use of hangers.
3. Brushing.

B. Renovating.

C. Mending, patching, darning.

D. Laundering.

REFERENCE: Kinne and Cooley, *Shelter and Clothing*, Chap. XXII.

VIII. Charts:

A. Textiles.
1. Comparative study.
2. Cost, width, use.
3. Identification.

B. Garments:
1. Pictures.
2. Material used.
3. Itemized cost.

C. Estimating cost of clothing budget.

REFERENCE: Kinne and Cooley, *Shelter and Clothing.*

IX. Simple embroidery:
- a. Scallop.
- b. Chain stitch.
- c. Feather-stitching.
- d. Outline.
- e. Cross-stitch.
- f. Catch-stitch.
- g. Hemstitch.
- h. French knot.

REFERENCE: Butterick Company, *Dressmaking up to Date.*

SIXTH GRADE

Special aims:

1. Skill in using sewing utensils.
2. Knowledge of selection of material.
3. To use patterns intelligently.
4. To plan, select materials, construct and estimate cost of garments made.
5. Skill in fundamental stitches.
6. To arouse an interest in economic conditions.

I. Weaving:
1. Review previous knowledge.
2. Study warp and woof threads.
   1. Relation to each other.
   2. Comparative strength.
   3. Distinguishing tests.

Practical work: Weaving a small article.

II. Darning:
1. Review weaving.
2. Important points in darning.
   1. Size of thread.
   2. Size of needle.
   3. Strengthening worn parts.
   4. Allowing loops for shrinkage.

Practical application: Darning stockinet or stockings.

III. Cutting out the body:
1. The commercial pattern.
   1. The markings.
   2. Testing the size.
   3. Reason for selection of given pattern.
2. The material.
   1. List of possible materials.
   2. Reason for selecting materials used.
   3. Reviewing warp and woof threads.
   4. Testing for warp and woof threads.
3. Placing pattern on material.
   1. According to markings.
   2. To save material.
4. Pinning, marking, notches and cutting.

IV. Making the body:

Method of procedure:
1. Practise basting stitches.
2. Baste seams of body.
3. Practise sewing stitches.
4. Select best one for seams for body.
5. Sew seams of body.
6. Practice hemming stitch.
7. Finish seams of body—flat fells.
8. Fold, baste, and hem back of body.
9. Study of true and garment bias.
10. Practice cutting true and garment bias, using striped paper or material.
11. Finish neck of body with bias facing.
12. Finish bottom of body.
    1. Narrow hem with belt, or
    2. Facing.
13. Practice:
    a. Buttonhole.
    b. Sewing on buttons.
       1. Making shank.
       2. Without shank.
14. Complete body

V. Divide class into four groups:

Group A. Make drawers or bloomers.

Group B. Make flannel skirt using bodies completed.
Group C. Make white skirt.
Group D. Make dress.

VI. Practice pieces to be made by the whole class at appropriate times:

1. Straight placket for drawers.
2. Skirt placket.
3. Gathering and putting on bands.
4. Measuring and sewing tucks.
5. Sewing on embroidery.
6. Sewing on lace.
7. Hemmed on patch.
8. Seams, single and double.
9. Finishing seams.
10. Simple embroidery.
11. Simple knitting.

VII. Christmas gifts.

SEVENTH GRADE

The course in clothing and textiles of the seventh grade is a repetition of the fundamental principles and processes learned in the sixth grade, the practical application being the student's clothing. There should be frequent reviews of difficult technical processes. New problems should be tried out on practice pieces before they are applied.

Sewing machine work is introduced either by use of school or home machines.

Where there is no machine in the school, allow the pupils to baste long seams at school, and sew them on the machine at home. The amount of home work should be limited, and carefully planned and supervised, otherwise careless work will result.

OUTLINE FOR SEVENTH GRADE

I. Review sixth grade work.

1. Use of pattern.
2. Selection of style, material.
3. Fundamental stitches.

Practical work: Small apron. Review handwork.

II. Machine:

1. Study parts.
2. Practice in use.

Practical work: Nightgown.

III. Hand and machine:

Practical work: Uniform for high school.

IV. Middy blouse.

V. Practice pieces:

1. Darning.
2. Overhand patching.
3. Flannel patch.
4. Hemming square and mitered corners.
5. Buttonholes, loops, eyelets.
6. Sewing on hooks and eyes; tape.
7. Matching straight and bias.
8. Hem, tucks, placket, bands.
9. Embroidery stitches.

V. Christmas gifts.

EIGHTH GRADE

The course for the eighth grade is prepared for those students who do not enter the high school. It is a review of the preceding grades, and advanced work on their own clothes.

The machine work forms the larger part of this year's work, but handwork should not be entirely omitted.

OUTLINE FOR THE EIGHTH GRADE

I. Corset cover—handwork.
II. Skirt. Machine work.
III. Simple dress.
IV. Christmas gifts.

MANUAL TRAINING

Manual Training in the upper grades beginning with the sixth, assumes a specialized form, and emphasis is laid upon technical skill, as well as the subject matter taught. While the projects made are those connected with the various interests of the boy's life, in most cases, we aim to lead along the line of our great industries. Talks are given to the pupils in the history and workings of our great American industries, so that they will have a view of centres other than those connected with their home and immediate environment. Opportunities are given the boys for the expression of their own ideas, and to this end directions are given in response to questions, rather than from mere dictation.

The individual is encouraged to observe for himself and after the fundamental processes incident to the successful completion of any constructive work have been mastered, a freer scope is given for original work properly directed by the instructor.

Manual Training is brought into as close relation with other school subjects as is possible.

Emphasis is laid upon increasing accuracy in the use of tools and materials; upon the proper technique of the simpler drawings, and upon neatness, accuracy, good construction, proper design, and finish.

It is planned to have every project take some useful form. The different projects undertaken by the same grades throughout the county do not necessarily involve the same technique, but are designed to meet local community or environment needs.

The projects undertaken may be classified as follows:

(1) Process projects, designed to teach mechanical construction, tool processes, and technique.

(2) Science projects designed to prove some law in physics, mechanics, or to better facilitate the teaching of some great American industry.

(3) Community projects, designed for some specific purpose, or suggested by the pupil, for use in the classroom, the shop, the school, or the home.

The instructor makes a study of every project planned in order to develop ability on the part of the pupil along the following lines:

(a) The making and reading of the mechanical drawing.

(b) The best mechanical construction.

(c) The care and use of the tools.

(d) The organization of the tool processes incident to the making of the project in keeping with the best technique.

(e) The correlation of the principles taught with other school subjects.

The course of study in the sixth grade has been planned to utilize and extend the knowledge and experience gained in the fifth grade course in Industrial Arts.

SIXTH GRADE

Time, 40 hours.

I. Cardboard:

Evolution of geometrical solids with their applications. Use measurements to sixteenths, binding with laps.

Teach proper use of drawing board, T-square, triangles, scale, compasses, cutting to lines, scoring for pasting, the proper use of glue, and method of pasting. Horizontal and vertical lines; the parts of a circle, and the geometric forms involved should be emphasized.

Models used: Cube, square prism, square pyramid, triangular prism, triangular pyramid, hexagonal pyramid, pentagonal pyramid, octagonal pyramid, rhombic prism, octohedron, octagonal prism, flight of steps, crystal forms, cylinder and Greek cross.

Teach modifications of type-forms and applications of the same in mats, boxes, trays, whiskbroom holders, bill holders, and angle protractors.

One of the most essential features of cardboard construction, other than cultivating the sense of form, the knowledge of distance, space and volume, the habits of neatness, accuracy, and concentrated application, is the correlation of this work with Mechanical Drawing. We have found through experience that a good, strong course in cardboard construction is a most valuable adjunct to the pupil, when he takes up the subject of Mechanical Drawing.

II. Projects:

Key tag, plant label, calendar back, thermometer back, bracket shelf, sundial, match-scratch, sailboat, windmill, scissors rack, stamp box, spool rack.

III. Tools:

Sloyd knife, T-square, marking gauge, block plane, bench hook, back saw.

IV. Processes:

Cross grain cut, diagonal cut, curved cut, concave cut, whittling, sawing, planing, squaring, filing, sand-papering and staining.

Talks on the proper use of the tools and processes of construction involved.

A working drawing in pencil is made previous to making the model, which is all the mechanical drawing given in this year.

INDUSTRY TAUGHT

THE PAPER TRADE

Recall knowledge and experience gained in the Industrial Arts work of the Fifth Grade, with special reference to topics, I, II and VII.

Introduction

I. The sources of supply:
   a. Rags; b. Pulp wood; c. Straw.
II. The pulping of the raw material:
   a. By hand; b. By machinery; c. The aid of chemicals.
III. Skilled labor:
   a. Advantage of location near experienced labor.
IV. Labor saving appliances:
   a. Machinery; b. Chemicals; c. Minerals.
V. Location of the factories:
   a. Early days, on water; b. Now located on railroad.
VI. Taxes on knowledge.
VII. Use and distribution:
   a. Printing, books, magazines, bill heads; b. Drawing; c. Wrapping, packing; d. Letter writing.
VIII. Social conditions.
IX. The paper trade in other countries.
X. Import of paper and paper-making materials.
XI. Duty collected thereon.
XII. Amount of paper manufacturing in the United States.
XIII. Exports of paper and paper-making materials.
XIV. Number of mills.
   a. Hand; b. Machine.
XV. Number of machines in the United States; also vats:
   a. Number of machines, 1800–1830.
   a. Number of hand mills, 1800–1830.
   b. Number of machines, 1830–1850.
   b. Number of hand-mills, 1830–1850.
   c. Number of machines, 1850–1900.
   c. Number of hand-mills, 1850–1900.
XVI. Amount of duty charged on various articles of paper manufacturing.
XVII. Amount of hand-made and machine, at different periods from 1800 to 1900.
XVIII. Wages earned by employees in the paper trade: Hand-made and machine made.
XIX. A resumé.

Computing the cost of the equipment used; prices being given by instructor.

Work out the square surface and cubic contents of the cardboard models constructed.

SEVENTH GRADE

Time, 50 hours. WOOD-WORK

I. Projects:

Hat-rack; flower-pot stand; nail box; whiskbroom holder; small shelf, laundry register; game board, sleeve board, bread board, coat hanger, table mats, etc.

II. Tools:

Jack-plane, spoke shave, cross-cut saw, and tools already introduced.

III. Processes:

End planing, beveling, testing for uniformity of width, and processes already introduced.

Talks on design; relation of parts; type of wood suitable for these models, and tools introduced.

INDUSTRY TAUGHT

Forest Utilization

I. Labor employed in the forest.
- A. Manual Labor.
  1. Emigrants furnished by Scandinavia, Poland, Italy, Balkan States, Mexico and Quebec are used in logging operations.
  2. Negroes are used to some extent in the southern states.
- B. Logging camps.
  1. Men's camps.
  2. Family camps.
- C. Duration of employment.
  1. Determining of employment.
    a. Climatic conditions.
    b. Economic conditions.
    c. Local custom.
- D. Remuneration.
  1. Means of remuneration.
    a. Money.
    b. Commissary bills.
    c. Privileges.
    d. Board.
  2. Scale of remuneration.
    a. Density of population.
    b. Human strength and skill.
    c. Hardships.
    d. Length of day.
    e. Tools used.
    f. Hardwood or soft wood.
- E. Method of employment.
  1. Day's work.
  2. Contract work.
- F. Subdivision of labor.
  1. Logging.
    a. Felling crew.
    b. Swamping crew.
    c. Bucking crew.
    d. Skidding crew.
    e. Loading crew.
    f. Road crew.
- G. Animal labor.
  1. Horses.
  2. Mules.
  3. Oxen.

II. Cutting operations.
- A. Woodman's tools and implements.
  1. Axe.
  2. Adze and broadaxe.
  3. Peavies.
  4. Cant hooks.
  5. Cross-cut saws.
  6. Wedges.
  7. Mauls.
  8. Pick axe.
  9. Brush hooks.
  10. Pike poles.
  11. Grindstones.
  12. Machine saws.
  13. Tree felling machines.
- B. Felling the trees.
  1. Obtaining pole without stumps and roots.
    a. By axe.
    b. By cross-cut saw.
  2. Obtaining pole with stump and roots.
    a. By tree felling machines.
- C. Dissecting the pole of the trees.
  1. Purpose of dissection.
    a. Reduce freightage.
    b. To accommodate buyers.
    c. Removal of defects.
  2. Factors influencing the dissection.
    a. Requirements of market.
    b. Distance from market.
    c. Locality.

d. Freight rates.
e. Length of mill carriages.
3. Specifications governing the dissection.
a. Dimensions.
b. Quality.

III. Transportation.
A. Land transportation without vehicles.
1. Shooting logs over "chutes."
a. Pole chutes, board chutes, earth chutes.
2. Skidding Logs.
a. By horses and oxen.
3. Log slides.
4 Drums, winches, gypsies, capstans, donkeys.
a. Hand drum.
b. Drum with mules.
c. Steam power.
B. Water transportation.
1. Loose driving.
a. Splash dams.
b. Dams in creek beds.
c. Booms.
2. Rafting.
3. Flumes.
a. An even constant grade from 1 to 5.
4. Water transportation over sloughs, lakes and sea.
a. By tugs.
C. Transportation on land by vehicles.
1. Roads.
a. Character (according to amount of traffic and road surface).
b. Investment in roads.
c. Road systems.
d. Drainage.
e. Wood covered.
f. Ice covered.
g. Steel covered (railroads.)
2. Vehicles:
a. Hand sleigh.
b. Tanback sled
c. High wheelers.
d. Low wheelers.
e. Log wagons, traction engines for log wagons, logging motor trucks (power wagon); locomotives.
D. Arrangements for loading logs on wagon, sleds and cars.
a. Loading on wagons and sleds.
1. Rolling up an inclined plane.
2. Tackle block attached to a tree.
3. The skidway scheme.
4. The log jammer.
b. Loading on railroad cars.
1. A huge tripod.
2. A drum and wire cable.
3. Portable crane and derricks.
4. Steam log loaders.

STAINS AND FINISHES

a. Stains.

Why should we finish wood?
To produce color, and to give an added beauty.
To preserve wood.
The preparation of the wood may be divided into the following steps:
Plane.
Scrape.
Sandpaper.
Dust.
Wet down with water.
Let dry.
Sandpaper.
Dust.
The different stains may be divided into four classes, viz:
Oil stains.
Aniline oil stains.
Water stains.
Made from anilines.
Made from dyes other than anilines.
Spirit stains.
Stains due to chemical changes.

b. Oil stains

Advantages.
Easy to prepare.
Easy to apply evenly.
Do not raise grain.
Disadvantages.
Tendency to hide grain.

Give a muddy effect.
Do not penetrate wood very deeply.
Impossible to stain hard-wood with them and at the same time keep the grain and the texture of the wood clear.

Oil stains in general are made:
Of pigments ground in oil—thinned turpentine.

The pigments most commonly used are: Burnt and Raw Umber, Burnt and Raw Sienna, Vandyke Brown, Drop Black and Medium Chrome Yellow.

Applied with brush and rubbed clean with cotton waste.

The colors may be varied by mixing.

Examples:

Cream
- Two parts drop black.
- One part medium chrome yellow.
- Dissolve in turpentine.

Antique oak
- Burnt umber.
- Black.
- Raw sienna.

Walnut stain
- Venetian red.
- Asphaltum.

c. Aniline oil stains

Colors clear and easily obtainable but crude and too bright.

Made by mixing colors soluble in oil, with turpentine and boiled oil.

Colors most commonly used are: Bismark brown, dark yellow, dark blue and black.

These are dissolved in three ounces of turpentine, one ounce of boiled oil and one teaspoon of color.

Applied with brush and rubbed clean with cotton waste.

d. Water stains

Advantages.
Cheap and clear.
Do not obscure the grain as oil stains are likely to do.
Penetrate deeply.
It is possible to secure a darker color than with oil stains.
Brushes are easily taken care of.

Disadvantages.
Hard to make and raise the grain of the wood.

The difficulty of raising the grain may be overcome by washing the wood before staining and then sandpapering, or by staining first, and then sandpaper and stain again if necessary.

Water stains are made from anilines.
As Bismark brown dissolved in water.

And from dyes other than anilines.
As logwood dissolved in water.

e. Spirit stains

Advantages.
Easily prepared and applied.

Disadvantages.
Expensive.
Colors not permanent.
The application is the same as for oil stains.
Made by dissolving in alcohol or naptha and any kind of dye.

Examples:
Black—Aniline black cut in alcohol, gives bluish effect, but if the wood thus stained is rubbed with boiled oil, it becomes black.
Golden oak—Dissolve asphaltum in naphtha, or equal parts of asphaltum and gold size japan, add turpentine and thin to proper consistency.
Mahogany—Dissolve Bismarck brown in alcohol.

f. Stains due to chemical changes

Substances like ammonia, potassium bichromate and acetate of iron give chemical reaction on certain woods.

Ammonia; process known as *fuming;* expose wood for day or more to strong fumes of 28 per cent ammonia, in an air-tight box.

Bichromate of potash dissolved in water gives a reddish brown.

Sulphuric acid (best on cypress), gives a purple color.

In general we may say that oil stains are better for soft wood, water stains

for hard wood and oil stains good for both.

MECHANICAL DRAWING

Time, 50 hours.

Review of instruments and drawing kit; explanation and making of working drawings of models used; drawing to scale and lettering. Drawing of specific models to illustrate principles involved.

The mathematics taught in this grade should include the estimate of the amount of lumber in board feet used in the making of each project and the cost of construction, allowing seven cents per hour for actual time consumed.

EIGHTH GRADE

Time, 50 hours. SHOP-WORK

I. Project:

Taborets, bookracks, necktie racks, broom holders, magazine racks, picture frames, hook troughs, foot stools.

II. Tools:

Brace and bit, chisels, gauges, mallet, hand clamps, and tools already introduced.

III. Processes:

Chiseling, cutting, sawing to fit; and processes already introduced. Talks on glueing, and the technique involved.

FOUNDATION OF MANUFACTURING

Industry Taught.

Forest Utilization.

A. Motive power in manufacturing.
   1. Actual animal power.
   2. Wind.
   3. Water.
      a. Overshot wheel.
      b. Breast wheel.
      c. Undershot or current wheel.
      d. Turbines.
   4. Steam.
      a. Boilers and engines.

B. Transmission of power.
   1. Belts.
      a. Kinds of belts.
   2. Pulleys.
      a. Kinds of pulleys.
   3. Shafts.

C. Technical use made of trees by species.
   1. Hardwood.
      a. Basswood (picture backs, boxes.)
      b. Maple (furniture, flooring.)
      c. Locust (construction work)
      d. Gum (ox yokes, stock of sleds).
      e. Walnut (interior finish).
      f. Oaks (furniture, wagons).
      g. Chestnut (bark for tanning, posts).
      h. Birch (furniture).
   2. Conifers.
      a. Cedar (fencing, furniture).
      b. Cypress (tanks, shingles, building).
      c. Pines (building, sash, and doors).
   3. Tropical and subtropical timber.
      a. Teak (ship building, flooring, railroad cars).
      b. Mahogany (furniture, interior finish).

D. Technical qualities of the trees.
   1. Botanical structure of the trees.
      a. Botanical structure of hard wood.
      b. Botanical structure of softwood.

2. Chemical qualities of wood.
   a. The walls of the tissues.
   b. Percentage of water contained.
   c. Percentage of cellulose contained.
3. Outer qualities.
   a. Texture.
   b. Color.
   c. Gloss.
   d. Odor.
4. Inner qualities.
   a. Specific gravity.
   b. Hardness.
   c. Cleavability.
   d. Pliability.
   e. Strength.
   f. Hygroscopicity or ability to retain moisture.
   g. Duration of wood.
   h. Heading power.

V. Manufacturing Industries.
   A. The sawmill.
      1. Saws.
         a. Straight saws.
         b. Circular.
      2. The carriage.
         a. Head block.
         b. Knees.
         c. Setworks.
         d. Driving machinery.
      3. Additional parts of high grade saw mill.
         a. The log haul up.
         b. The nigger.
         c. The hog.
         d. Dust conveyors.
      4. The edger.
         a. Removal of defects.
         b. Splitting board into pieces of different qualities.
         c. Rapid sawing.
      5. The trimmer.
         a. Shortening of boards to standard length.
         b. Remove defects on either end.
         c. Cutting of "straight ends."
      6. Yard work.
         a. Sorting.
         b. Piling.
         c. Dry kiln.
   B. The wood working plant.
      1. Planing.
         a. Dressed boards.
         b. Size boards.
      2. Flooring.
      3. Resawing.
      4. Ripping.
      5. Cut off sawing.
      6. Sandpapering.
      7. Scraping.
      8. Mitering.
      9. Molding.
   C. Veneer plant.
      1. Veneer saws.
         a. Horizontal mill saw.
         b. Circular saw.
      2. Veneer cutting machines.
         a. Rotary veneer machines.
         b. Stationary veneer machine.
      3. Advantages of veneering.
         a. There is little lost.
         b. Veneer shows little damage by warping.
         c. Composite furniture.
   D. Box factory.
      1. Kinds of boxes.
         a. Plane.
         b. Knocked down.
         c. Nailed.
      2. Material.
         a. Yellow pine.
         b. Ash.
         c. Sycamore.
         d. Hemlock.
      3. Machinery.
         a. Planer.
         b. Resaw.
         c. Ripsaw.
         d. Cut-off saw.
         e. Box board matcher.
      4. Business side.
      5. Expense of manufacture.
   E. Basket works.
      1. Willow baskets.
      2. Wooden baskets.
   F. Cooperage Works.
      1. Terminology.
         a. Slack (for lime, vegetables, cement, etc.)
         b. Tight (for liquids.)

2. Material used.
   a. White oak.
   b. Red oak.
   c. White ash.
   d. Elm.
   e. Chestnut.
3. Manufacturing.
   a. Heading.
   b. Staves.
   c. Hoops.
   d. Barrels.
4. Wooden pipes.

G. Wagon works.
1. Raw material.
   a. Hickory.
   b. Ash.
   c. Oak.
   d. Birch.
2. Manufacturing.
   a. Hubs.
   b. Spokes.
   c. Rims and felloes.
   d. Axles.
   e. Shaft and spokes.
   f. Wagon box boards.

H. Shingle mill.
1. Material.
   a. Pine.
   b. Cedar.
   c. Spruce.
   d. Hemlock.
2. Machinery.
   a. Drag saw.
   b. Bolter.
   c. Jointer.
   d. Shingle packer.
   e. Shingle planer.

I. Lath mills.
1. Material.
   a. Chestnut.
   b. Hemlock.
2. Machinery.
   a. Slab resaw.
   b. Lath bolter.
   c. Lath machine.
   d. Lath bundling machine.

J. Ground wood pulp mills and chemical fiber mills.
1. The Plant.
   a. Location.
2. Process of manufacture.
   a. Ground wood fiber.
   b. Soda process.
   c. Sulphate process.
   d. Sulphite process.
   e. Electric process.

K. Pyroligeneous acid wood (methyl) alcohol.
1. Raw material.
   a. Beech.
   b. Maple.
   c. Birch.
2. Distillation.
3. The plant.
   a. The report house
   b. The still house.
4. Output.
5. Use.

L. Ethyl alcohol.
1. Principle underlying the process.
2. Raw material.
   a. Cottonwood, linden, yellow poplar.
3. Process.
4. Output.
5. Use.

M. Manufacture of oxalic acid.
1. Principle.
2. Raw material.
   a. Oak.
   b. Beech.
   c. Pine.
   d. Chestnut.
3. Process.
4. Output.
5. Use.

N. Maple sugar industry.
1. Tapping the trees.
   a. Methods.
   b. Utensils.
2. Boiling process.
   a. Manufacture of sugar.
   b. Manufacture of syrup.

O. Naval stores. Their production and manufacture.
1. Methods of orcharding.
   a. Southern method (boring, hacking and collecting).
   b. French method.

c. Dr. Charles H. Hertys' gutter method.
d. The airtight jar method.

2. Manufacture of naval stores from pine product.
a. From rosin.
b. From the wood.
c. From the stump and roots.

3. The manufactured products.
a. Turpentine.
b. Colophony.
c. Wood-tar.

4. Use of naval stores
a. Paints.
b. Asphalt.
c. Glue.
d. Soap making.

5. Output.

P. Impregnation.

1. Use of impregnation.
a. To destroy bad hygroscopic qualities.
b To impart a desirable color to furniture.
c. To cause fireproofing wood.
d. To increase durability.

2. Methods used in impregnation.
a. Immersion in NaC' and CaC.'
b. Boiling.
c. Use of hydrostatic pressure.
d. Use of air pressure (open tank method).
e. Use of steam pressure.

FINISHING

Stains and Finishes

a. Fillers:

Object of filling:

To give a level and non-absorbent basis for varnish or other finish.

Fillers are made:

Of silex in needle-shaped particles mixed with raw linseed oil, japan and turpentine.

Application:

With brush along the grain of wood. As it dries it becomes a grayish color and then it is rubbed off across the grain.

It should be applied after staining wood, and allowed to stand at least forty-eight hours before varnish is applied.

Use:

More necessary on open grain woods such as chestnut, oak and mahogany, than on close grained woods such as white wood, maple and pine.

Fillers are of different colors for the different kinds of work and wood.

For example:

Oil darkens wood, and if wood is to be kept light a filler without oil, as whiting and turpentine should be used.

For golden oak, use golden oak filler and for mahogany use mahogany filler.

Finishes or polishes:

The polishes may be divided into three different classes:

Oil.

Wax.

b. Varnishes:

Spirit varnishes.

Oil varnishes.

c. Oil:

Advantages:

Its permanency.

It stands both wetting and warmth.

It gives a dull, glossy finish.

It brings up figure.

Process of application:

Apply either raw or boiled linseed oil diluted with five parts of benzine or turpentine.

The advantages of dilution are that it gives a better penetrating mixture and leaves a thinner film on the wood.

Rub considerably day after day, little and often, with unlimited friction.

d. Wax:

Used before the French polish and varnish were introduced.

Advantages:

Cheap.

Easily prepared.
Easily applied.
Disadvantages:
Will not stand wetting.
Easily marred.
Requires constant care.
Becomes slightly sticky with warmth.
Likely to turn white in crevices.
Preparation:
One part of melted beeswax and one part turpentine.
Process of application:
Rub wax evenly over surface, with stiff brush or fingers, let dry for several hours, then rub with piece of cloth or felt. Apply several coats, leaving over night. then rubbing with a warm cloth.

e. Varnishes:
Function:
To cover wood with a hard transparent covering that is non-porous and impervious to moisture.
Classes of varnishes:
Spirit varnishes.
Oil varnishes.

f. Spirit varnishes:
Are made from resinous gums cut in alcohol, benzine, acetone, etc.
Dry with great rapidity, leaving a hard coat of the resin.
Shellac:
Most common and most useful of spirit varnishes. Basis is a compound resinous substance exuded from an East Indian scale insect (carteria lacca) found mostly in Assam.
French polishing:
Finest of shellac finishes.
Process of:

g. Oil or copal varnishes.
Are made principally of linseed oil and turpentine with copal as the base. (Copal, a fossil resinous substance of vegetable origin.)

h. Process of varnishing:
Surface of wood perfectly even and smooth.
Staining, filling and drying completed.
Apply with brush until the varnish has flowed over the work evenly. Set in dry dustless place.
When dry, repeat the process from three to six times.

Time, 50 hours. MECHANICAL DRAWING

The working out of plans for the projects made and the making of drawings illustrating the relation of views and cross-sectioning.

The mathematics of this grade should include the estimating of the amount of lumber in logs of given sizes and computing the cost of individual models.

TEXTS:

DRAWING TEXTS: *Problems in Mechanical Drawing,* Anthony; *Problems in Mechanical Drawing,* Bennett; *Course in Mechanical Drawing,* Leeds; *Course in Mechanical Drawing,* Rouillion.

CARDBOARD TEXTS: *Cardboard Construction,* J. H. Trybom; *Correlated Handwork,* Trybom and Holler.

ELEMENTARY WOODWORK: *Elementary Sloyd,* Larrson.

WOODWORK: *Correlated Course in Woodwork and Mechanical Drawing,* Griffith; *Wood and Forestry,* Noyes; *Constructive Carpentry,* King; *Educational Woodwork,* Parks.

INDUSTRIAL TEXT: *Shop Mathematics,* Parts I and II, Castle; *Shop Mathematics,* Holton; *Descriptive Geometry,* Miller; *Machine Shop Primer,* Calvin and Stanley.

149040 Educat. Teach. B.

Author Baltimore County, Maryland

Title Course of Study- Public Schools, Grades I to VIII.

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